OPERATIONS MANUAL FOR OWNERS AND MANAGERS

Multi-Unit Residential Buildings

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Operations Manual for Owners and Managers of Multi-Unit Residential Buildings

Canada Mortgage and Housing Corporation

July 2003

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SECTION 1.0

introduction

1.0 Introduction

Operational expenses represent up to 66 per cent of the overall annual expenses of multi-unit residential buildings. Unlike other building-related expenses, the operating budget represents an expense that the property owner, or manager, has some control over. It is estimated that in many multi-unit residential buildings, operation- and maintenance-related expenses could be reduced by up to 25 per cent by adopting more efficient and effective maintenance practices.

Canada Mortgage and Housing Corporation developed this manual in cooperation with the Canadian Condominium Institute, and the Association of Condominium Managers and Operators to assist property owners and managers of multi-unit residential buildings. Its purpose is to reduce the cost of operating multi-unit residential buildings, improve the overall affordability and to sustain the stock of apartment buildings in Canada.

While much of the information contained within this manual is directed at reducing costs, it also provides helpful direction for improving the overall performance of apartment buildings in terms of durability and occupant health and safety.

By adopting the operating practices recommended by this manual, the property owners and managers of multi-unit residential buildings will ensure that their buildings operate as long-term financial assets rather than liabilities.

1.1 Summary of Manual

The ***Operations Manual for Owners and Managers - Multi-Unit Residential Buildings*** provides owners and managers with the tools to tailor a cost-effective and successful management system for any multi-residential building.

The process described in this manual will guide the owner/manager in:

1) Creating an ***Operation and Energy Management Plan***. A building-specific set of documents to guide staffing, manpower and task planning, contracting, tenant management, budgeting, fire and life safety essentials, and utility management.

2) Making resource decisions concerning on-site staff or outside contractors.

3) Creating an organized filing system.

1.2 Use of Computers

Building managers are encouraged to use a personal computer with this system for the following reasons:

1. The template forms presented can be easily re-created on computer, modified for the particular building and printed as needed.

2. Budgeting, bookkeeping, and cost tracking are easily accomplished with a computer. The accuracy and time-savings are worth far more than the $1,000 to $2,000 spent on a computer.

The software required:

• Word Processing	Microsoft Word
• Tabular Forms	Microsoft Excel
• Drawings and Other Forms	Microsoft Visio
• Budgeting	Intuit Quicken for Windows

The programs listed are available in both PC and MAC versions with the exception of Visio. For Visio, the files require conversion to a similar MAC program. There are similar products for each of these, and the diskette files can be imported and used by other programs.

1.2.1 Backing Up Data

When computerizing the property management process, one can become very reliant on the computer and the information stored on the hard disk. Computers do fail, and it is also quite possible for a user to accidentally erase critical information. For these reasons, it is strongly suggested to set up a formal data backup system to retain a full, current backup at all times. Keeping the backup safely off site ensures that in the event of a disaster (fire or theft of the computer), a duplicate system is readily available.

The backup process will usually require an additional hardware component such as a tape drive. Talk to a computer retailer when choosing a system.

SECTION 2.0

resources

2.0 Resources

Management can be defined as getting the right things done properly at the right time by making best use of the resources available to do the work. Tasks can be completed by on-site staff or by an outside contractor. This is known as a "Make or Buy" policy. The decision of which resource to use affects both the quality and the cost of the job. To maximize the long-term profitability of the building, it is advisable to consider whether on-site staff given their skills, available time and motivation should do the work.

2.1 "Make or Buy" Policy

By creating a "Make or Buy" policy for each task involved in the operation and maintenance of a building, the roles and expectations of the superintendent and the on-site staff, as well as those of the outside contractors will be clearly defined. Three methods of creating a "Make or Buy" policy are outlined below. The methods vary in the effort required, as well as their accuracy.

Rule of Thumb Method

Experience has shown the number of suites in a building determines the need for outside contractors.

- Over 150 suites – the Superintendent needs an assistant for regular tasks.
- 50 to 150 suites – the Superintendent does regular inspections, housekeeping of ground floor areas, cleaning vacant suites, ensuring quality of contract work, and responding to tenant concerns.
- 50 to 80 suites – the Superintendent also does corridor cleaning on all floors in addition to the tasks listed above.
- Less than 50 suites - Superintendent also cuts the grass and minor touch-up painting in addition to the tasks listed above.

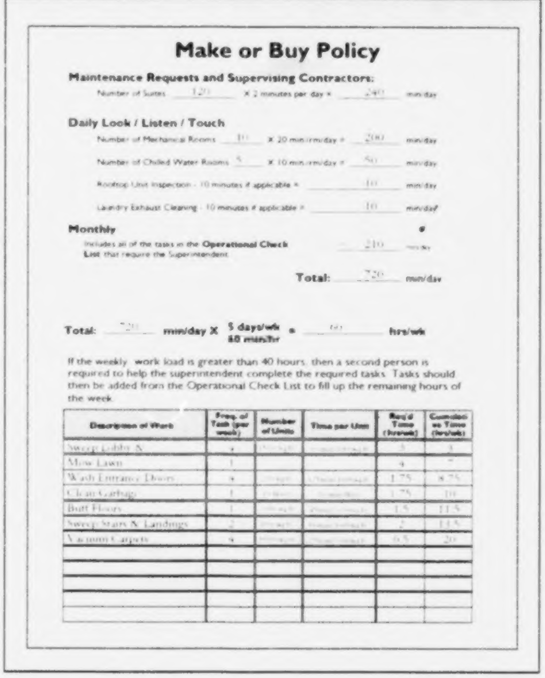
Note that multiple small buildings can be handled by a single Superintendent, but only if the buildings are located side by side.

Refer to ***Appendix G: Schedule of Budget Times Required for Various Cleaning Tasks*** for a suggested breakdown of time requirements per task.

Detailed Analysis Method

The Detailed Analysis Method uses the ***Master Operational Checklist (Appendix F).*** This method increases the accuracy above the Rule of Thumb Method by taking into account the number of suites, the number of equipment rooms and the monthly tasks.

Figure 2.1: Make or Buy Policy Form



Make or Buy Policy

Maintenance Requests and Supervising Contractors:

Number of Suites 120 × 2 minutes per day = 240 min/day

Daily Look / Listen / Touch

Number of Mechanical Rooms 10 × 20 min/rm/day = 200 min/day

Number of Chilled Water Rooms 5 × 10 min/rm/day = 50 min/day

Rooftop Unit Inspection - 10 minutes if applicable = 10 min/day

Laundry Exhaust Cleaning - 10 minutes if applicable = 10 min/day

Monthly

Includes all of the tasks in the **Operational Check List** that require the Superintendent 210 min/day

Total: 720 min/day

Total: 720 **min/day X** $\frac{\textbf{5 days/wk}}{\textbf{60 min/hr}}$ **=** 60 **hrs/wk**

If the weekly work load is greater than 40 hours, then a second person is required to help the superintendent complete the required tasks. Tasks should then be added from the Operational Check List to fill up the remaining hours of the week.

Description of Work	Freq. of Task (per week)	Number of Units	Time per Unit	Req'd Time (hrs/wk)	Cumulative Time (hrs/wk)
Sweep Lobby &	5	[illegible]	[illegible]	3	3
Mow Lawn	1			4	7
Wash Entrance Doors	5	[illegible]	[illegible]	1.75	8.75
Clean Garbage	1	[illegible]	[illegible]	1.75	10
Buff Floors	1	[illegible]	[illegible]	1.5	11.5
Sweep Stairs & Landings	2	[illegible]	[illegible]	2	13.5
Vacuum Carpets	5	[illegible]	[illegible]	6.5	20

The ***Make or Buy Policy* form** ***(Figure 2.1)*** uses Values for Time per Unit that are listed in ***Appendix G - Schedule of Budget Times Required for Various Cleaning Tasks.*** A copy of a blank ***Make or Buy Policy*** form is located at the end of this chapter.

The form consists of two sections:

1. The first section calculates the amount of time that is required in the day-to-day operation of the facility.
2. The second section adds to the workload of the Superintendent and site staff to bring the total hours up to 40 hours per week per staff member.

Upon completion of the ***Make or Buy Policy*** form the Manager is able to quantify the staff requirement. In the example shown, two full-time staff are required, of which one is the building Superintendent. Since the total hours per week is 60, another 20 hours per week of work would be required to keep both people busy. This is shown in the chart at the bottom of the form. Any extra work required that is not included on this form would be contracted out.

If the weekly workload totals greater than 40 hours, a second person would be required to help the Superintendent to complete the required tasks. Tasks are then added from the ***Master Operational Checklist*** to fill up the remainder of the week.

Trial Method

The ***Trial Method*** is the most accurate method of estimating week operation and maintenance resource requirements. It is also the most expensive and time consuming. It involves having an experienced and trusted Superintendent move into the occupied building for at least a month. By performing the work, the Superintendent can indicate the number of site staff required and realistic task load for each staff member involved. It is important that the Superintendent performs all of the tasks required to maintain the building. (Daily Look/Listen/Touch Inspection, Supervising Contractors, etc.)

2.2 Site Staff

The on-site staff is the most valuable resource a property owner or manager has in a building. The ability of on-site staff to operate and maintain multi-unit residential buildings can have a strong influence on the overall profitability of the property. Competent on-site staff will effectively oversee outside contractors and will remain attentive to the condition of building systems thus preserving the long-term value of building assets. Property owners and managers must be able to accurately estimate the number of staff required to operate a property, recruit responsible and motivated candidates, manage and assess the performance of on-site staff in day-to-day activities. This is not only important for the successful operation of the building, but also for the retention of valuable employees.

The manager must delegate authority and accountability to on-site staff to perform specific functions. When responsibilities are clearly defined, delegated functions can be isolated and studied. This enables a manager to objectively assess each person's job performance. Once internal labour requirements and broad job categories are determined, a job description should be created to define the exact requirements and management expectations of each position. Present the job description to job applicants at the time of hiring, and ask them to sign it prior to starting work. Use the signed job description annually at performance review time. It will assist in assessing the employee's performance and progress, and also to make revisions that reflect operating experience. Keep in mind the time requirements need to be taken into account and included in the signed job description.

Appendix B contains an example agreement of the *Superintendent's Responsibilities.*

2.2.1 Scheduling

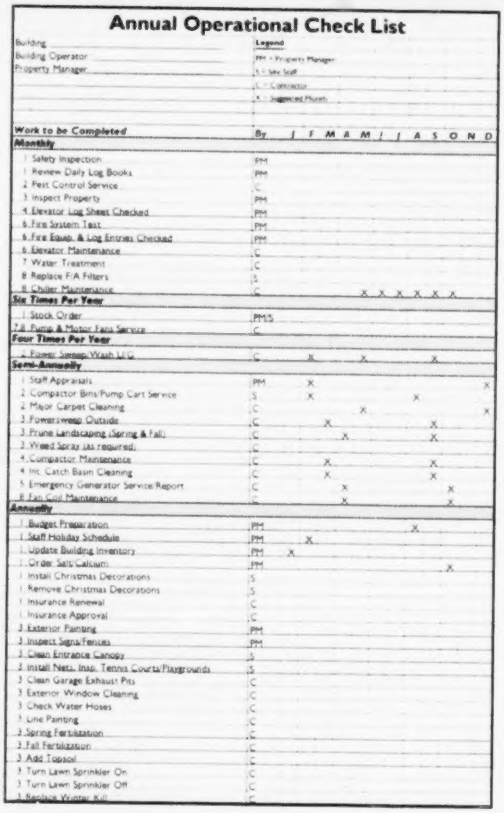
It is necessary to prepare timelines for tasks once a master list of activities for operating the building is established. These activities would include frequency of each task and assigned responsibilities *(Figure 2.2 – Annual Operational Checklist).* The development of timelines for each task is undertaken for the following reasons:

1. To equitably spread out the workload for site staff.
2. To post a visual reminder to the property manager and the on-site staff, indicating what should be done.
3. To track the effectiveness of the on-site staff and execution of contracts.

There are two charts to list tasks, responsibilities and timing, which assist with scheduling and tracking. ***The Annual Operational Checklist*** shows the months of the year, and any activities required monthly or less frequently. The numbers in the far left column indicate the section number in the ***Operations Manual for Maintenance and Custodial Staff - Multi-Unit Residential Buildings*** where details of the task can be found.

A blank template of this form is provided at the end of this chapter.

Figure 2.2: Annual Operational Checklist



Annual Operational Check List

Building

Building Operator

Property Manager

Legend

PM = Property Manager

S = Site Staff

C = Contractor

X = Suggested Month

Work to be Completed	**By**	**J**	**F**	**M**	**A**	**M**	**J**	**J**	**A**	**S**	**O**	**N**	**D**
Monthly													
1 Safety Inspection	PM												
1 Review Daily Log Books	PM												
2 Pest Control Service	C												
3 Inspect Property	PM												
4 Elevator Log Sheet Checked	PM												
6 Fire System Test	PM												
6 Fire Equip. & Log Entries Checked	PM												
6 Elevator Maintenance	C												
7 Water Treatment	C												
8 Replace F/A Filters	S												
8 Chiller Maintenance	C					X	X	X	X	X	X		
Six Times Per Year													
1 Stock Order	PM/S												
7,8 Pump & Motor Fans Service	C												
Four Times Per Year													
2 Power Sweep/Wash U/G	C		X			X				X			
Semi-Annually													
1 Staff Appraisals	PM		X										X
2 Compactor Bins/Pump Cart Service	S		X						X				
2 Major Carpet Cleaning	C					X							X
3 Powersweep Outside	C			X						X			
3 Prune Landscaping (Spring & Fall)	C				X					X			
3 Weed Spray (as required)	C												
4 Compactor Maintenance	C			X						X			
4 Int. Catch Basin Cleaning	C			X						X			
5 Emergency Generator Service/Report	C				X						X		
8 Fan Coil Maintenance	C				X						X		
Annually													
1 Budget Preparation	PM								X				
1 Staff Holiday Schedule	PM		X										
1 Update Building Inventory	PM	X											
1 Order Salt/Calcium	PM										X		
1 Install Christmas Decorations	S												
1 Remove Christmas Decorations	S												
1 Insurance Renewal	C												
1 Insurance Approval	C												
3 Exterior Painting	PM												
3 Inspect Signs/Fences	PM												
3 Clean Entrance Canopy	S												
3 Install Nets, Insp. Tennis Courts/Playgrounds	S												
3 Clean Garage Exhaust Pits	C												
3 Exterior Window Cleaning	C												
3 Check Water Hoses	C												
3 Line Painting	C												
3 Spring Fertilization	C												
3 Fall Fertilization	C												
3 Add Topsoil	C												
3 Turn Lawn Sprinkler On	C												
3 Turn Lawn Sprinkler Off	C												
3 Replace Winter Kill	C												

The Superintendent's three most time-consuming tasks are:

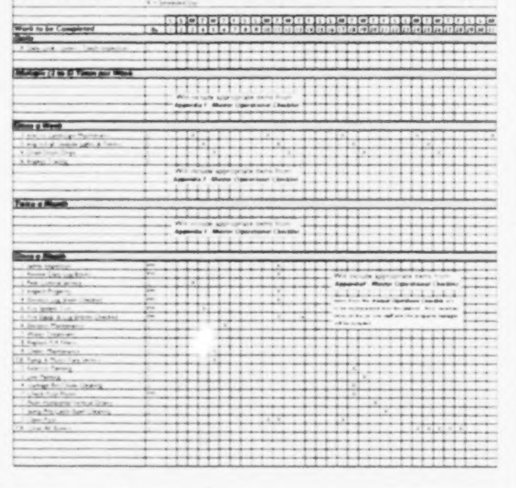
1. Daily ***Look/Listen/Touch Inspections***
2. Confirming that contractors are fulfilling their obligations
3. Investigating and responding to tenants' maintenance requests.

Other less frequent activities fall under the Superintendent's Responsibilities ***(Appendix B)*** and should be scheduled on the ***Monthly Operational Planner (Figure 2.3).***

The ***Monthly Operational Planner (Figure 2.3)*** outlines activities for each day of an entire month, and should be filled in prior to the start of each month. Tasks more frequent than once a month should appear on the planner. Activities coming due from the ***Annual Operational Checklist (Figure 2.2)*** should be transferred to this chart. This provides an opportunity to balance the workload throughout the entire month. The ***Monthly Operational Planner*** is a convenient way to communicate expectations and schedules to the site staff.

A blank template of this form is provided at the end of this chapter.

Figure 2.3: Monthly Operational Planner



Monthly Operational Planner

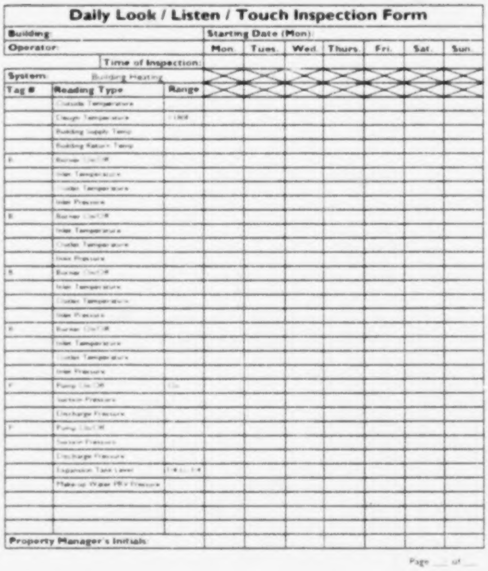
2.2.2 Inspections

The largest single daily responsibility of the site staff is an organized inspection of critical mechanical and electrical systems. The ***Daily Look/Listen/Touch Inspection Form (Figure 2.4)*** creates a systematic and efficient means to determine that the building's systems are functioning properly. ***Look/Listen/Touch Inspection*** forms can be adapted from the example provided at the end of this chapter.

The Superintendent or other site staff can use these forms during the look/listen/touch inspections to confirm inspections and to record pressure gauge and temperature readings. Problems are spotted more quickly using this system, leading to faster and less expensive repairs. When the forms are stored in a binder on site, they provide a history of equipment performance and also serve to confirm that the equipment is being checked on a regular basis.

The inspection forms will differ for each building, but the following sample can be used as a starting point.

Figure 2.4: Daily Look/Listen/Touch Inspection Form



Daily Look / Listen / Touch Inspection Form

Building:			**Starting Date (Mon):**						
Operator:			**Mon.**	**Tues.**	**Wed.**	**Thurs.**	**Fri.**	**Sat.**	**Sun.**
	Time of Inspection:								
System:	Building Heating								
Tag #	**Reading Type**	**Range**							
	Outside Temperature								
	Design Temperature	[illegible]							
	Building Supply Temp								
	Building Return Temp								
B	Burner On/Off								
	Inlet Temperature								
	Outlet Temperature								
	Inlet Pressure								
B	Burner On/Off								
	Inlet Temperature								
	Outlet Temperature								
	Inlet Pressure								
B	Burner On/Off								
	Inlet Temperature								
	Outlet Temperature								
	Inlet Pressure								
B	Burner On/Off								
	Inlet Temperature								
	Outlet Temperature								
	Inlet Pressure								
P	Pump On/Off	[illegible]							
	Suction Pressure								
	Discharge Pressure								
P	Pump On/Off								
	Suction Pressure								
	Discharge Pressure								
	Expansion Tank Level	[illegible]							
	Make-up Water PRV Pressure								
Property Manager's Initials:									

Page ___ of ___

Typical Page from Daily Look/Listen/Touch Inspection Form

When estimating the time required for the look/listen/touch inspection, allow approximately 20 minutes per mechanical room (10 minutes for central chilled water), plus 10 minutes for rooftop equipment. A 150-unit building with a basement boiler/ chiller room, a swimming pool (with filter/ pump room), and two rooftop makeup air units would require a 60-minute daily inspection. This time estimate will differ slightly depending upon the on-site experience in the building.

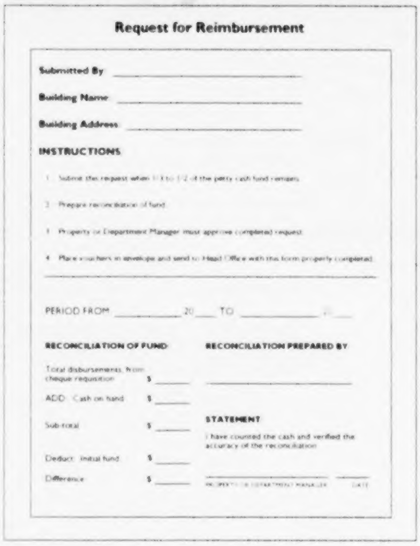
2.2.3 Miscellaneous Disbursements

At times the Superintendent must make minor purchases to sustain workflow, restore inventory and fix small problems. A petty cash system should be set up in order to avoid continual request approval.

This can be done with a locked box (stored in a secure place by the Superintendent) with a starting fund of approximately $200. The Superintendent uses the ***Request for Reimbursement form (Figure 2.5)*** to replenish petty cash as needed. The Superintendent must attach all receipts to the completed form in order to cover expenses. A full-sized copy of this form is included at the end of this chapter.

It is essential that all petty cash expenditures be entered into the computerized bookkeeping system.

Figure 2.5: Request for Reimbursement Form



Request for Reimbursement

Submitted By ______________________

Building Name ______________________

Building Address ______________________

INSTRUCTIONS

1. Submit this request when 1/3 to 1/2 of the petty cash fund remains
2. Prepare reconciliation of fund
3. Property or Department Manager must approve completed request
4. Place vouchers in envelope and send to Head Office with this form properly completed

PERIOD FROM __________ 20___ TO __________ 20___

RECONCILIATION OF FUND

Total disbursements, from cheque requisition $ ______

ADD: Cash on hand $ ______

Sub-total $ ______

Deduct: Initial fund $ ______

Difference $ ______

RECONCILIATION PREPARED BY

____

STATEMENT

I have counted the cash and verified the accuracy of the reconciliation

______________________ ________

PROPERTY OR DEPARTMENT MANAGER DATE

2.2.4 Emergency Work Orders

Emergency situations will occur. In such cases the Superintendent may not be able to get in touch with the property manager or owner but will require the authority to approve emergency repairs. Section 4.0 suggests those areas that may require the Superintendent to authorize emergency expenditures. The Superintendent should be given clear instructions as to when an emergency response is appropriate. Emergency contacts and recommended repair contractors should be provided to the Superintendent.

Prepare the Superintendent by going over the type of situation where emergency response is appropriate, and by providing a list of specialists to call. Provide the following information, perhaps on a pocket card that the Superintendent can carry with him.

Problem Area	Contact	Phone
Serious Foundation Leaks	Foundation Contractor	
Serious Roof Leaks	Roofer	
Heating/ Cooling	Mechanical Contractor	
Electrical	Electrician	
Television Reception	Television Repair, Cable Company	

2.2.5 Pagers

The use of pagers and cell phones vary, depending on the number of staff, the building size and the pager type. It is necessary to have a procedure for the use of the pagers and cell phones that is understood by all staff. For example, a pager with only audible noise may indicate that a staff member must report to the superintendent's office. An alphanumeric pager may give instructions without the need to reply. Cell phones can relay information immediately without having the Superintendent return to a central location for instructions.

2.3 Outside Contractors

Building managers are encouraged to hire outside contractors for structural, electrical, and mechanical services. If the building is 130 suites or over, contractors rather than site staff can be used for housekeeping and grounds keeping.

In smaller buildings with less than 130 suites, a single Superintendent should have time to take on housekeeping and possibly grounds keeping as well. Refer to ***Section 2.1*** to determine what jobs the Superintendent can be expected to do and what jobs should be contracted to outside service providers.

Successful service companies must provide quality service in a competitive market. Their staff is trained to be as proficient as possible. This translates to better quality at a lower cost. When housekeepers or grounds keepers are professionally trained to carry out the tasks assigned to them, the result is a prestige job at a minimal cost. Unprofessional people may waste time, materials and supplies. They can cause equipment breakdowns and keep the building manager busy struggling to maintain acceptable conditions.

2.3.1 Defining the Standards

The first step in choosing a housekeeping, grounds keeping or electrical/mechanical contractor is to define the service to be provided and the expected standards in writing. Written standards for a service contract need not be full of legal jargon. However, they must be clear in covering expectations. Use point form in mechanical/electrical service contracts to list pieces of equipment and systems along with specific tasks and their frequency. For housekeeping or grounds keeping, establish uniform and acceptable conditions.

Use the following levels of cleanliness when requesting pricing for housekeeping or grounds keeping, based objectively on the expectations and potential reactions of building occupants:

1. **Prestige Cleaning or Grounds Keeping:** This standard will provide unsolicited compliments from building occupants or visitors. Cleaning or grounds appearance complaints would be a rarity. See the ***Sample Cleaning Guide (Figure 3.1)*** and ***Sample Grounds Keeping Guide (Figure 3.2)*** in section ***3.1 Housekeeping*** for tasks and frequencies required for a prestige level of cleaning and grounds keeping.

2. **Adequate Cleaning or Grounds Keeping:** This standard of service will provide neither compliments nor serious criticism.

3. **Minimal Cleaning or Grounds Keeping:** This standard of service will result in criticism by building occupants or visitors. In this system, complaints usually trigger periodic **special cleanups** to avoid losing tenants. This standard of care is not recommended as it can result in high occupant turnover and can be a sign that other, more costly building systems are not being maintained.

Ensure standards are realistic and are budgeted for. If not realistic, contractors are faced with the dilemma of either:

- Bidding to the literal specification, thus pricing them out of contention, or
- Submitting a lower bid and performing a substandard job.

This situation is unfavourable as it encourages a lack of integrity and professionalism. Management may also have difficulty receiving true comparable bids.

To help develop suitable specifications and standards, management should follow the following process:

1. Analyze the standards required for housekeeping, grounds keeping, structural, electrical, and mechanical services. Where is the property positioned in the market? What are the expectations of the occupants?

2. Determine the frequency of tasks necessary to meet the standards.

3. Express the frequencies and tasks in detailed written format.

4. Define what is meant by each task.

5. Send the requirements to three or four reputable contractors. Do not contact everyone in the phone book. Many contractors will not want to put the effort into bidding when they perceive their chances of winning the contract to be slim. Identify good contractors through referrals by other property managers or by talking to people at industry association meetings.

2.4 Workplace Hazardous Materials Information Systems (WHMIS)

The ***Workplace Hazardous Materials Information Systems*** is a Canada-wide system designed to provide information on hazardous materials contained in all manner of products to employers and employees. It essentially gives everyone in the workplace the "Right to Know" what they are working with, the dangers involved, what precautions should be taken and what emergency procedures are in place should there be an accident involving the products. This will primarily involve cleaning products but could also extend to paint, floor finishes, lubricants, etc.

The property manager is responsible to ensure that all employees are properly trained as laid out by WHMIS Regulations.

Contact the department of labour within the provincial government for specific information on applicable legislation. Further information can be found in section ***1.4 Workplace Safety*** of the ***Operations Manual for Maintenance and Custodial Staff***.

2.4.1 Material Safety Data Sheet

The following information comes from the CMHC brochure *How To Read a Material Safety Data Sheet*.

A Material Safety Data Sheet (MSDS) is an information sheet that lists the hazards, and safety and emergency measures related to specific products. An MSDS is required for certain industrial products used in the workplace like paint, caulking and cleaners. An MSDS is not required for consumer products, but may be available.

The Workplace Hazardous Materials Information System (WHMIS) is legislation that states the following:

- A Material Safety Data Sheet (MSDS) must be provided to commercial users.
- A hazard label must be attached to commercial products used in the workplace that contain substances above the pre-set limits controlled by WHMIS.
- Workers using WHMIS-controlled products must receive training.

You may want to know if there are chemicals in consumer products that can cause adverse health effects such as allergies or asthma. This information may be helpful if you are interested in preventing exposure to chemicals from new products or in finding out if existing products may be causing symptoms.

Suppliers are not required to provide you with an MSDS. However, you can ask them if they have one for a commercial product that is similar to your purchase. You may also obtain an MSDS from a data bank such as the Canadian Centre For Occupational Health and Safety.

In an emergency situation your doctor can request an MSDS. If the product is required to have one, the supplier is obligated to provide it to the doctor.

Certain product labels include a full list of ingredients, and some suppliers will provide it if you ask. You can also request the supplier's chemist for more information, including a list of additional ingredients.

Not all ingredients are included on an MSDS: only specific hazardous chemicals are required. Some suppliers voluntarily include additional chemicals and information. The MSDS lists each required substance that makes up more than 1 per cent of the product. However, if the chemical causes cancer, respiratory sensitization, or reproductive effects, then it must be listed if it makes up more than 0.1 per cent.

Assessing Exposure Risk

There are several factors to consider to determine if you should be concerned about exposure risk. The quantity, toxicity and other effects, as well as the potential exposures of each chemical, should be considered. It is also important to know that most of the information on an MSDS relates to exposure to one chemical at a time. The information does not reflect exposure to the complex mixtures of chemicals found in a typical building. Also, most of the information on an MSDS was developed in relation to adult male exposures. Therefore, it may have little or no relevance to children, women or elevated risk populations.

MSDS Technical Terms

This manual uses simple language for convenience. Listed below are some definitions of terms you may find on an MSDS.

- Carcinogen: causes cancer
- Hormonal: some chemicals act like hormones
- Reproductive toxin: damages the male or female sex organs, sperm or eggs
- Sensitization: reduced body resistance to a substance or material, this causes one to react to a smaller exposure than before
- Teratogen: causes developmental abnormalities to the fetus (unborn child)
- Toxin/toxic: poison/poisonous

Several organizations publish guides that are designed to help you understand an MSDS. Listed below are some examples.

- The Industrial Accident Prevention Association (IAPA) *A Users Guide to MSDS.* This is one of the easiest guides to read. It includes illustrations to describe technical ideas.
- The Canadian Centre for Occupational Health and Safety (CCOHS) *The Material Safety Data Sheet - A Basic Guide for Users*
- *The Material Safety Data Sheet – An Explanation of Common Terms*

Getting an MSDS

A faxed copy of an MSDS is often difficult to read. It is best to get a copy from the Internet or have one mailed to you. You may receive a nine-section MSDS as required in Canada, or a sixteen-section MSDS as required elsewhere. The information required and the location in the document, is different on a nine- and sixteen-section MSDS. Suppliers develop their own MSDS's. Therefore, MSDS's may contain different information for the same product, chemical and section.

Very little data exists for certain chemicals. However, the absence of health and environmental effects does not mean that there are none. It means either that there is no data on the chemical, or that the supplier did not decide it was important to include the chemical in the MSDS.

For more information on a MSDS, refer to ***Appendix I – Material Safety Data Sheet – Supplemental Information.***

forms for chapter 2.0- resources

Annual Operational Check List

Building: ______________________________
Building Operator: ______________________________
Property Manager: ______________________________

Legend
PM = Property Manager
S = Site Staff
C = Contractor
X = Suggested Month

Work to be Completed		*By*	*J*	*F*	*M*	*A*	*M*	*J*	*J*	*A*	*S*	*O*	*N*	*D*
Monthly														
1	Safety Inspection	PM												
1	Review Daily Log Books	PM												
2	Pest Control Service	C												
3	Inspect Property	PM												
4	Elevator Log Sheet Checked	PM												
6	Fire System Test	PM												
6	Fire Equip. & Log Entries Checked	PM												
6	Elevator Maintenance	C												
7	Water Treatment	C												
8	Replace F/A Filters	S												
8	Chiller Maintenance	C					X	X	X	X	X	X		
Six Times Per Year														
1	Stock Order	PM/S												
7,8	Pump & Motor Fans Service	C												
Four Times Per Year														
2	Power Sweep/Wash U/G	C		X			X				X			
Semi-Annually														
1	Staff Appraisals	PM		X										X
2	Compactor Bins/Pump Cart Service	S		X						X				
2	Major Carpet Cleaning	C					X							X
3	Powersweep Outside	C			X						X			
3	Prune Landscaping (Spring & Fall)	C				X					X			
3	Weed Spray (as required)	C												
4	Compactor Maintenance	C			X						X			
4	Int. Catch Basin Cleaning	C			X						X			
5	Emergency Generator Service/Report	C				X						X		
8	Fan Coil Maintenance	C				X						X		
Annually														
1	Budget Preparation	PM								X				
1	Staff Holiday Schedule	PM		X										
1	Update Building Inventory	PM	X											
1	Order Salt/Calcium	PM										X		
1	Install Christmas Decorations	S											X	
1	Remove Christmas Decorations	S	X											
1	Insurance Renewal	C												
1	Insurance Approval	C												
3	Exterior Painting	PM					X	X						
3	Inspect Signs/Fences	PM					X							
3	Clean Entrance Canopy	S					X							
3	Install Nets, Insp. Tennis Courts/Playgrounds	S					X							
3	Clean Garage Exhaust Pits	C							X					
3	Exterior Window Cleaning	C							X					
3	Check Water Hoses	C			X									
3	Line Painting	C						X						
3	Spring Fertilization	C				X	X							
3	Fall Fertilization	C									X	X		
3	Add Topsoil	C										X		
3	Turn Lawn Sprinkler On	C					X							
3	Turn Lawn Sprinkler Off	C										X		
3	Replace Winter Kill	C					X							

Daily Look / Listen / Touch Inspection Form

Building:			Starting Date (Mon):						
Operator:			Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.	Sun.
	Time of Inspection:								
System:	Building Heating								
Tag #	Reading Type	Range							
	Outside Temperature								
	Design Temperature	<180F							
	Building Supply Temperature								
	Building Return Temperature								
B-	Burner On/Off								
	Inlet Temperature								
	Outlet Temperature								
	Inlet Pressure								
B-	Burner On/Off								
	Inlet Temperature								
	Outlet Temperature								
	Inlet Pressure								
B-	Burner On/Off								
	Inlet Temperature								
	Outlet Temperature								
	Inlet Pressure								
B-	Burner On/Off								
	Inlet Temperature								
	Outlet Temperature								
	Inlet Pressure								
P-	Pump On/Off	On							
	Suction Pressure								
	Discharge Pressure								
P-	Pump On/Off								
	Suction Pressure								
	Discharge Pressure								
	Expansion Tank Level	1/4 to 3/4							
	Make-up Water PRV Pressure								
Property Manager's Initials:									

Page 1 of ___

Daily Look / Listen / Touch Inspection Form

Building:			Starting Date (Mon):						
Operator:			Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.	Sun.
	Time of Inspection:								
System:	Misc. Heating System								
Tag #	Reading Type	Range							
B-	Burner On/Off								
	Inlet Temperature								
	Outlet Temperature								
	Inlet Pressure								
B-	Burner On/Off								
	Inlet Temperature								
	Outlet Temperature								
	Inlet Pressure								
P-	Pump On/Off	On							
	Suction Pressure								
	Discharge Pressure								
P-	Pump On/Off								
	Suction Pressure								
	Discharge Pressure								
	Primary Heating Supply Temp.								
	Primary Heating Return Temp.								
	Expansion Tank Level	1/4 to 3/4							
	Make-up Water PRV Pressure								
Property Manager's Initials:									

Page 2 of ___

Daily Look / Listen / Touch Inspection Form

Building:			Starting Date (Mon):						
Operator:			Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.	Sun.
	Time of Inspection:								
System:	Domestic Hot Water								
Tag #	Reading Type	Range							
B-	Burner On/Off								
	Pump On/Off								
	Outlet Temperature								
	Outlet Pressure								
B-	Burner On/Off								
	Pump On/Off								
	Outlet Temperature								
	Outlet Pressure								
P-	Recirc. Pump On/Off	On							
	Tank Temperature								
	Tank Temperature								
	Supply Water Temperature								
System:	Corridor Supply Air								
SF-	Corridor Fan On/Off								
	Corridor Temperature								
	Burner #1 On/Off								
	Burner #2 On/Off								
P-	Glycol Pump On/Off								
	Glycol Supply Temp.								
	Expansion Tank Level	1/4 to 3/4							
Property Manager's Initials:									

Page 3 of ___

Daily Look / Listen / Touch Inspection Form

Building:			**Starting Date (Mon):**						
Operator:			Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.	Sun.
	Time of Inspection:								
System:	Chilled Water Plant								
Tag #	**Reading Type**	**Range**							
CH-	Chiller On/Off								
	Oil Temperature Heater On/Off								
	Chilled Water Supply Temp.								
	Condenser Water Temperature								
CT-	Cooling Tower High/Low/Off								
P-	Chilled Water Pump On/Off								
P-	Condenser Water Pump On/Off								
	Room Temperature								
	Cooling Tower Water Meter Reading								
System:	Elevator Machine Room								
EL-	Elevator On/Off								
EL-	Elevator On/Off								
EL-	Elevator On/Off								
EL-	Elevator On/Off								
	Exhaust Fan On/Off								
	Room Temperature								
	Fire Hose Cabinet Pressure								
Property Manager's Initials:									

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Daily Look / Listen / Touch Inspection Form

Building:			Starting Date (Mon):						
Operator:			Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.	Sun.
		Time of Inspection:							
System:	Pool Mechanical Room								
Tag #	Reading Type	Range							
P-	Pump On/Off								
MAU -	Make-Up Air Fan On/Off								
	Supply Air Temperature								
EF -	Exhaust Fan On/Off								
	Return Air Temperature								
System:	Emergency Generator								
EG -	Generator Block Heater On/Off	On							
	Room Temperature								
	Clock Reading								
System:	Utility Meters								
	Water Meter Reading								
	Main Electrical Meter Reading								
	Demand Meter - Red Needle								
	Demand Meter - Black Needle								
	Main Gas Meter Reading								
Property Manager's Initials:									

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Daily Look / Listen / Touch Inspection Form

Building:			Starting Date (Mon):						
Operator:			Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.	Sun.
		Time of Inspection:							
System:	Domestic Water Booster Pumps								
Tag #	Reading Type	Range							
P-	Booster Pump On/Off								
	Inlet Pressure								
	Outlet Pressure								
P-	Booster Pump On/Off								
	Inlet Pressure								
	Outlet Pressure								
System:	Fire Safety Systems								
P -	Main Fire Pump On/Off/Auto	Auto							
	Inlet Pressure								
	Outlet Pressure								
P -	Fire Jockey Pump On/Off/Auto	Auto							
CO -	Compressor On/Off/Auto	Auto							
SS -	Sprinkler Air Pressure								
	Sprinkler Water Pressure								
V -	Sprinkler Valve Open/Closed	Open							
V -	Sprinkler Valve Open/Closed	Open							
V -	Sprinkler Valve Open/Closed	Open							
V -	Sprinkler Valve Open/Closed	Open							
Property Manager's Initials:									

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Daily Look / Listen / Touch Inspection Form

Building:			Starting Date (Mon):						
Operator:			Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.	Sun.
	Time of Inspection:								
System:									
Tag #	Reading Type	Range							
Property Manager's Initials:									

Page ___ of ___

Make or Buy Policy

Maintenance Requests and Supervising Contractors:

Number of Suites ________ X 2 minutes per day = ________ min/day

Daily Look / Listen / Touch

Number of Mechanical Rooms ________ X 20 min./rm/day = ________ min/day

Number of Chilled Water Rooms ________ X 10 min./rm/day = ________ min/day

Rooftop Unit Inspection - 10 minutes if applicable = ________ min/day

Laundry Exhaust Cleaning - 10 minutes if applicable = ________ min/day

Monthly Tasks:

Includes all of the tasks in the **Operational Check List** that require the Superintendent. = 30 min/day

Total: ________ min/day

Total: ________ **min/day X $\frac{\text{5 days/wk}}{\text{60 min/hr}}$ =** ________ **hrs/wk**

If the weekly work load is greater than 40 hours, then a second person is required to help the superintendent complete the required tasks. Tasks should then be added from the Operational Check List to fill up the remaining hours of the week.

Description of Work	Freq. of Task (per week)	Number of Units	Time per Unit	Req'd Time (hrs/wk)	Cumulative Time (hrs/wk)
Example: Sweep Lobby & Entrance	4	1,500 Sq.ft.	30 min/1,000sq.ft	3	3

Request for Reimbursement

Submitted By: ______________________

Building Name: ______________________

Building Address: ______________________

INSTRUCTIONS:

1. Submit this request when 1/3 to 1/2 of the petty cash fund remains.
2. Prepare reconciliation of fund.
3. Property or Department Manager must approve completed request.
4. Place vouchers in envelope and send to Head Office with this form properly completed.

PERIOD FROM: ____________ 20___ TO: ____________ 20___

RECONCILIATION OF FUND:

Total disbursements, from cheque requisition	$ ______
ADD: Cash on hand	$ ______
Sub-total	$ ______
Deduct: Initial fund	$ ______
Difference	$ ______

RECONCILIATION PREPARED BY:

____

STATEMENT:

I have counted the cash and verified the accuracy of the reconciliation.

______________________ ________

PROPERTY OR DEPARTMENT MANAGER DATE

SECTION 3.0 housekeeping and grounds keeping services

3.0 Housekeeping and Grounds Keeping Services

3.1 Housekeeping

It is estimated that in Canada, $500 million is spent annually on housekeeping and sanitation. This involves the efforts of 500,000 workers. It was further estimated that 25 per cent of the effort and expenditure was wasted through inefficiencies of the people carrying out these tasks. The cleaning dollar breaks down as follows:

- 90 per cent - 95 per cent for labour
- 5 per cent - 10 per cent for materials, chemicals, tools, and equipment

Because labour costs are such a significant factor, the secret to success is to develop "knowledgeable workers." If housekeeping is contracted to an established outside company, the primary responsibilities of the property manager are to:

- State the contractors' responsibilities and results expectations.
- Provide quality control through the Superintendent.
- Communicate in writing to the contractor when there are quality concerns, listing the occasions on which the work has not met the contract requirements.

Managers should ensure that they have the option to change contractors by ensuring that contracts can be cancelled due to unsatisfactory performance. Letters to the contractor will help in voiding existing contracts and allow the option to re-tender the work. Expect to spend time for the first two or three months with a new contractor to establish acceptable standards.

To achieve above-average housekeeping productivity, managers must oversee the organization of:

- Personnel
- Responsibilities
- Tasks
- Standards of cleanliness
- Time (workload)
- Task procedures (schedules)
- Products, chemicals, tools, and equipment.

It is important that cleaners fully understand:

- What they intend to accomplish
- How to perform each task
- Expected standard of cleanliness
- How often the task must be performed
- Equipment, tools, chemicals, parts and supplies for each job, and how they are used
- Safety practices

This information is relayed first through the written standard on which the contract is based. It is then reinforced through contact between on-site staff and the contractor's staff. At times, the contractor's practices may not match with the desired preference. Where changes in practices are needed, formal notes of clarification should be written and attached to the contract and sent to the contractor's management. As long as desired changes are presented in an open and friendly manner, minor changes will not affect the contract.

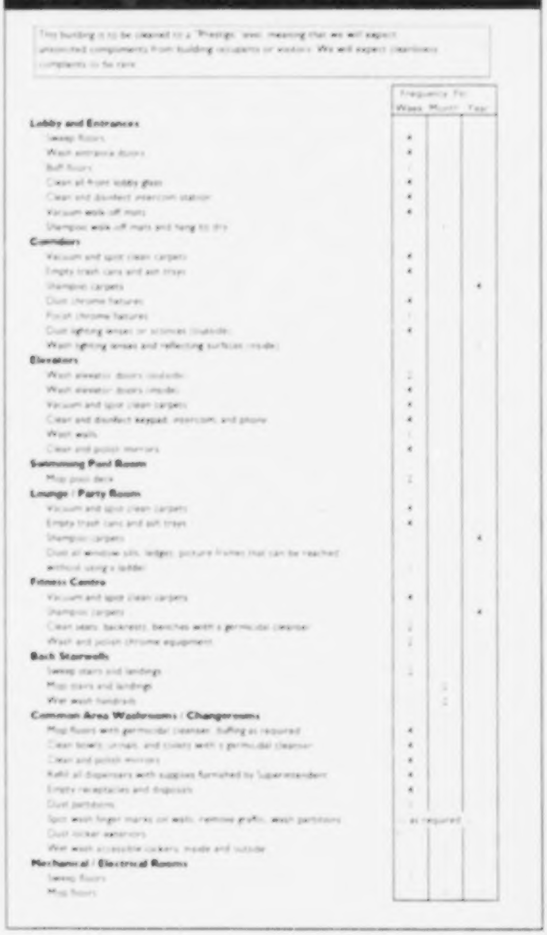
The following ***Sample Cleaning Guide*** in ***Figure 3.1*** sets specification guidelines for a prestige level of cleaning. Reduce the frequency if a lower standard is acceptable. Use a copy of a completed ***Annual Operational Checklist*** (created as discussed in ***Section 2.2.1***), and highlight those tasks to be included in the contract.

Once the table is developed, it can be presented along with relevant building details and legal provisions, to a group of selected bidders.

It is recommended to ask for more detail than just the price from each bidder. To determine the validity of the pricing, ask for an overall annual man-hour estimate and how many people will be working in the building. Estimates should be backed up by references.

Use the information in ***Appendix G - Schedule of Budget Times Required for Various Cleaning Tasks*** to establish specific housekeeping manpower requirements.

Figure 3.1: Sample Cleaning Guide



This building is to be cleaned to a "Prestige" level, meaning that we will expect unsolicited compliments from building occupants or visitors. We will expect cleanliness complaints to be rare.

	Frequency Per Week	Frequency Per Month	Frequency Per Year
Lobby and Entrances			
Sweep floors	[illegible]		
Wash entrance doors	[illegible]		
Buff floors	1		
Clean all front lobby glass	[illegible]		
Clean and disinfect intercom station	[illegible]		
Vacuum walk off mats	[illegible]		
Shampoo walk off mats and hang to dry		1	
Corridors			
Vacuum and spot clean carpets	[illegible]		
Empty trash cans and ash trays	[illegible]		
Shampoo carpets			[illegible]
Dust chrome fixtures	[illegible]		
Polish chrome fixtures	1		
Dust lighting lenses or sconces (outside)	[illegible]		
Wash lighting lenses and reflecting surfaces (inside)			[illegible]
Elevators			
Wash elevator doors (outside)	2		
Wash elevator doors (inside)	[illegible]		
Vacuum and spot clean carpets	[illegible]		
Clean and disinfect keypad, intercom, and phone	[illegible]		
Wash walls	1		
Clean and polish mirrors	[illegible]		
Swimming Pool Room			
Mop pool deck	2		
Lounge / Party Room			
Vacuum and spot clean carpets	[illegible]		
Empty trash cans and ash trays	[illegible]		
Shampoo carpets			[illegible]
Dust all window sills, ledges, picture frames that can be reached without using a ladder	1		
Fitness Centre			
Vacuum and spot clean carpets	[illegible]		
Shampoo carpets			[illegible]
Clean seats, backrests, benches with a germicidal cleanser	2		
Wash and polish chrome equipment	2		
Back Stairwells			
Sweep stairs and landings	[illegible]		
Mop stairs and landings		[illegible]	
Wet wash handrails		[illegible]	
Common Area Washrooms / Changerooms			
Mop floors with germicidal cleanser, buffing as required	[illegible]		
Clean bowls, urinals, and toilets with a germicidal cleanser	[illegible]		
Clean and polish mirrors	[illegible]		
Refill all dispensers with supplies furnished by Superintendent	[illegible]		
Empty receptacles and disposals	[illegible]		
Dust partitions	1		
Spot wash finger marks on walls, remove graffiti, wash partitions	- as required -		
Dust locker exteriors	[illegible]		
Wet wash accessible lockers, inside and outside	[illegible]		
Mechanical / Electrical Rooms			
Sweep floors	[illegible]		
Mop floors		[illegible]	

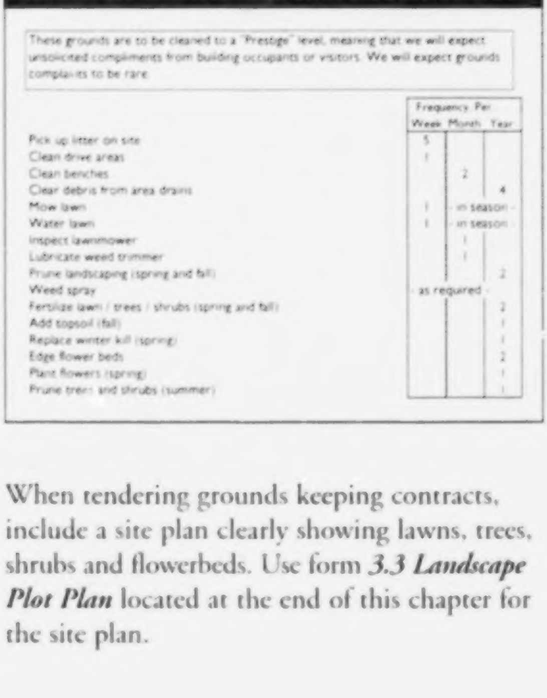
3.2 Grounds Keeping

Grounds keeping represents a much smaller workload than housekeeping, and is seasonal rather than year round. Unless the building is small and the Superintendent has time to do the grounds keeping alone, use an outside contractor.

As with housekeeping, use a highlighted copy of the ***Annual Operational Checklist*** (created as discussed in ***Section 2.2.1***), to determine grounds keeping specifications.

The following ***Sample Grounds Keeping Guide (Figure 3.2)***, sets specification guidelines for a prestige level of grounds keeping. This table should be adapted to the requirements of each specific building.

Figure 3.2: Sample Grounds Keeping Guide



These grounds are to be cleaned to a "Prestige" level, meaning that we will expect unsolicited compliments from building occupants or visitors. We will expect grounds complaints to be rare.

	Frequency Per Week	Frequency Per Month	Frequency Per Year
Pick up litter on site	5		
Clean drive areas	1		
Clean benches		2	
Clear debris from area drains			4
Mow lawn	1	- in season -	
Water lawn	1	- in season -	
Inspect lawnmower		1	
Lubricate weed trimmer		1	
Prune landscaping (spring and fall)			2
Weed spray	- as required -		
Fertilize lawn / trees / shrubs (spring and fall)			2
Add topsoil (fall)			1
Replace winter kill (spring)			1
Edge flower beds			2
Plant flowers (spring)			1
Prune trees and shrubs (summer)			1

When tendering grounds keeping contracts, include a site plan clearly showing lawns, trees, shrubs and flowerbeds. Use form ***3.3 Landscape Plot Plan*** located at the end of this chapter for the site plan.

3.3 Green Initiatives

Canadian laws are gradually changing to emphasize protection of the natural environment. Furthermore, there is a growing public concern regarding the potential health affects of herbicides and pesticides.

Additionally, there is a growing public awareness of the limits of water resources and the need for conservation. From a business standpoint and for improved public relations it makes sense to consider environmental alternatives from the outset. This may include the use of organic pest and weed control strategies (offered by many lawn and garden service providers), minimizing the need for site irrigation and adoption of xeriscaping (the use of indigenous plants and grasses together with landscaping) to minimize the impact of pests, weeds and eliminates the need for watering.

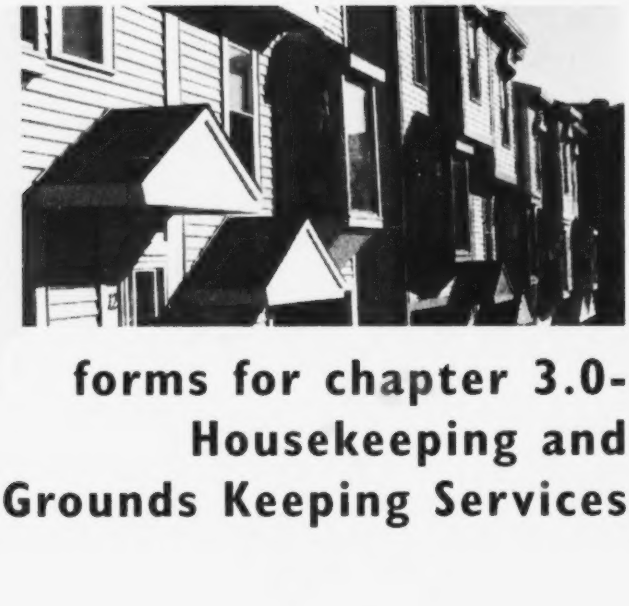
3.3.1 Recycling

Recycling programs are active in most parts of the country, and may include mandated separation of certain recyclables. Find out the details by contacting the municipality, and work with the appropriate municipal representative to set up separate, adequately sized bins. Establish pickup areas and post appropriate signs to restrict parking in these areas.

Recycling programs can divert a significant volume from the building's waste stream thereby reducing garbage removal fees.

3.3.2 Pesticides

Pesticides are now recognized as a potential environmental hazard, and their use should be restricted.



forms for chapter 3.0- Housekeeping and Grounds Keeping Services

3.3 Landscape Plot Plan **Building Profile - Groundskeeping** Updated on ____________

Building Name: ____________________

Building Number: ____________________

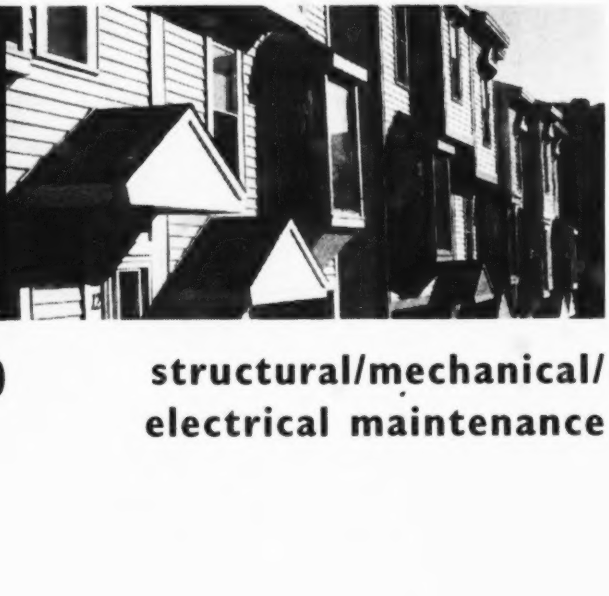
Page ___ of ___

Housekeeping Manhours Guide

	Task	By	Time Requirement
Daily			
2.5.2	Clean Garbage Compactor Room	S/C	
2.5.3	Clean Interior Glass	S/C	300 s.f. per hour
2.5.5	Clean Common Area Washrooms/Showers	S/C	
	- per toilet		4 min
	- per door, spot wash both sides		1 min
	- mirrors		1 min
	- sanitary napkin dispenser		1/2 min
	- urinal		3 min
	- wash basin and soap dispenser		3 min
	- general cleaning		120 min per 1000 sq.ft.
2.5.6	Clean Sauna Room	S/C	
2.5.8	Spot Cleaning	S/C	
Multiple Times per Week			
2.2	Sweep Floors of Lobby & Entrances (4 times)	S/C	30 min per 1000 sq.ft.
2.5	Wash Entrance Doors (4X)	S/C	125 min per 1000 sq.ft.
2.5.4	Clean Lobby Glass (4X)	S/C	125 min per 1000 sq.ft.
2.5	Clean and Disinfect Intercom System (4X)	S/C	2 min
2.3.2	Vacuum Walk-Off Mats (4X)	S/C	30 min per 1000 sq.ft.
2.3	Vacuum & Spot Clean Carpets in Corridors (4X)	S/C	30 min per 1000 sq.ft.
	Empty Trash Cans and Ash Trays (4X)	S/C	0.5 min per can or ashtray
2.5	Dust Chrome Fixtures (4X)	S/C	0.4 min per fixture
2.5	Dust Lighting Lenses or Sconces (outside) (4X)	S/C	0.4 min per fixture
2.5	Wash Elevator Doors (outside) (2X)	S/C	5 min per door pair
2.5	Wash Elevator Doors (inside) (4X)	S/C	5 min per door pair
2.3	Vacuum & Spot Clean Elevator Carpets (4X)	S/C	5 min per elevator
2.5	Clean and Disinfect Elevator Controls (4X)	S/C	2 min
2.5	Clean and Polish Elevator Mirrors (4X)	S/C	300 sq.ft. per hour
2.2.2	Mop Pool Deck (2X)	S/C	100 min per 1000 sq.ft. (includes rinse)
2.3	Vacuum & Spot Clean Lounge Carpet (4X)	S/C	30 min per 1000 sq.ft.
2.3	Vacuum Common Room Carpets (4X)	S/C	25 min per 1000 sq.ft.
2.3	Spot Clean Common Room Carpets (4X)	S/C	5 min per 1000 sq.ft.
2.5	Clean Fitness Centre Equipment (2X)	S/C	
2.2	Sweep Stairs and Landings (2X)	S/C	60 min per 1000 sq.ft.
Weekly			
2.5	Buff Floors	S/C	45 min per 1000 sq.ft.
2.5	Polish Chrome Fixtures	S/C	2 min per fixture
2.5	Wash Elevator Walls	S/C	30 min per elevator
2.5	Dust all Common Room Ledges	S/C	
2.2	Sweep Floors in Mechanical / Electrical Rooms	S/C	30 min per 1000 sq.ft.
2.5.3	Clean Garbage Chute	S/C	10 min per floor
Twice a Month			
2.2.1;2.2.2	Mop Stairs and Landings		100 min per 1000 sq.ft. (includes rinse)
2.5	Wet Wash Handrails in Stairwells		5 min per stairwell per floor
Monthly			
2	Shampoo Walk-Off Mats and Hang to Dry	S/C	15 minutes per mat
2.2	Mop Floors in Mechanical / Electrical Rooms	S/C	100 min per 1000 sq.ft. (includes rinse)
2	Spot Sweep Underground Parking	S/C	30 min per 1000 sq.ft.
Four Times per Year			
2	Shampoo Carpets	C	60 min per 1000 sq.ft.
Three Times per Year			
2	Power Sweep/Wash U/G	C	15 to 50 min per 1000 sq.ft., depends on machine used
Semi-Annually			
2	Major Carpet Cleaning	C	60 min per 1000 sq.ft.
2.5.1	Int. Catch Basin Cleaning	C	
Annually			
2	Inspect Benches, Planters & Tree Guards	C	
2	Perform Maintenance on Snow Blower	C	
Misc. (Frequency)			
2	Clean Suite (Tenant Change)	S/C	

This building is to be cleaned to a "Prestige" level, meaning that we will expect unsolicited compliments from building occupants or visitors. We will expect cleanliness complaints to be rare.

	Frequency, Per...		
	Week	Month	Year
Lobby and Entrances			
Sweep floors	4		
Wash entrance doors	4		
Buff floors	1		
Clean all front lobby glass	4		
Clean and disinfect intercom station	4		
Vacuum walk-off mats	4		
Shampoo walk-off mats and hang to dry		1	
Corridors			
Vacuum and spot clean carpets	4		
Empty trash cans and ash trays	4		
Shampoo carpets			4
Dust chrome fixtures	4		
Polish chrome fixtures	1		
Dust lighting lenses or sconces (outside)	4		
Wash lighting lenses and reflecting surfaces (inside)			1
Elevators			
Wash elevator doors (outside)	2		
Wash elevator doors (inside)	4		
Vacuum and spot clean carpets	4		
Clean and disinfect keypad, intercom, and phone	4		
Wash walls	1		
Clean and polish mirrors	4		
Swimming Pool Room			
Mop pool deck	2		
Lounge / Party Room			
Vacuum and spot clean carpets	4		
Empty trash cans and ash trays	4		
Shampoo carpets			4
Dust all window sills, ledges, picture frames that can be reached without using a ladder	1		
Fitness Centre			
Vacuum and spot clean carpets	4		
Shampoo carpets			4
Clean seats, backrests, benches with a germicidal cleanser	2		
Wash and polish chrome equipment	2		
Back Stairwells			
Sweep stairs and landings	2		
Mop stairs and landings		2	
Wet wash handrails		2	
Common Area Washrooms / Changerooms			
Mop floors with germicidal cleanser, buffing as required	4		
Clean bowls, urinals, and toilets with a germicidal cleanser	4		
Clean and polish mirrors	4		
Refill all dispensers with supplies furnished by Superintendent	4		
Empty receptacles and disposals	4		
Dust partitions	1		
Spot wash finger marks on walls, remove graffiti, wash partitions	--- as required ---		
Dust locker exteriors	1		
Wet wash accessible lockers, inside and outside		1	
Mechanical / Electrical Rooms			
Sweep floors	1		
Mop floors		1	



SECTION 4.0

structural/mechanical/electrical maintenance

4.0 Structural/Mechanical/Electrical Maintenence

Most equipment and structural maintenance can be handled by outside contractors specializing in the equipment and the type of work required. It is better to consult with specialists than to guess (for example boiler maintenance). As with housekeeping and grounds keeping, it is up to the manager to establish the regular tasks and performance measurements in consultation with the service provider.

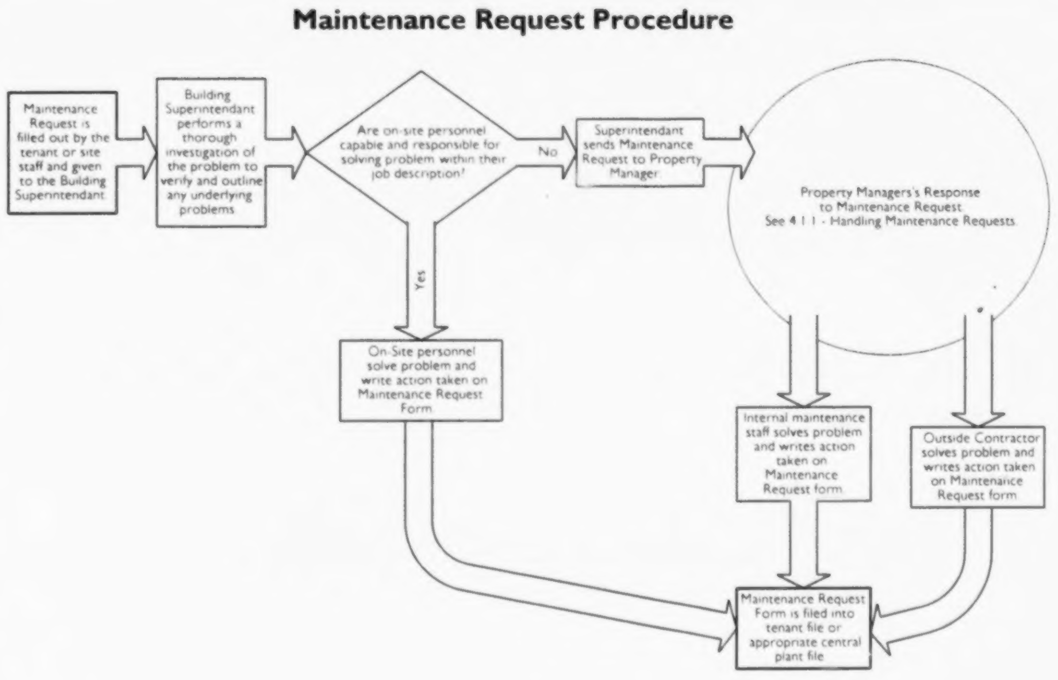
The on-site staff will have copies of the ***Monthly Operational Planner (Figure 2.3)***. Part of their job will be to oversee the work of the contractors.

4.1 Maintenance Requests

It is important to have a standard method for occupants to use to request maintenance or repairs.

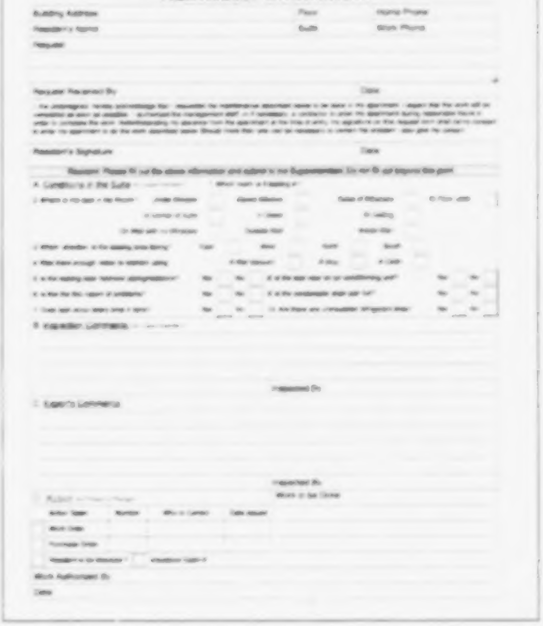
Tenants cannot be allowed to disrupt the work of on-site staff for minor maintenance problems, or chaos and inefficiency will prevail. Generally, maintenance or repair problems are detected by tenants or by one of the site staff. In either case, a ***Maintenance Request Form (MRF)*** should be filled out. The tenants should be given standard MRF's with their ***Tenant Care Package***, along with instructions on how and when to use them. All MRFs are delivered to the building management.

Figure 4.1: Maintenance Request Procedure


Maintenance Request Procedure
Maintenance Request is filled out by the tenant or site staff and given to the Building Superintendant
Building Superintendant performs a thorough investigation of the problem to verify and outline any underlying problems
Are on-site personnel capable and responsible for solving problem within their job description?
No
Yes
Superintendant sends Maintenance Request to Property Manager
Property Managers's Response to Maintenance Request See 4.1.1 - Handling Maintenance Requests
On-Site personnel solve problem and write action taken on Maintenance Request Form
Internal maintenance staff solves problem and writes action taken on Maintenance Request form
Outside Contractor solves problem and writes action taken on Maintenaince Request form
Maintenance Request Form is filed into tenant file or appropriate central plant file

Two specialized ***Maintenance Request Forms (Figures 4.2 and 4.3)*** for heating problems and rainwater infiltration should be available for use by the site staff only. A MRF drop-off box should be available to occupants for submission of maintenance requests after hours.

Figure 4.2: Maintenance Request Form – Rainwater Infiltration



Maintenance Request Form
– Rainwater Infiltration –

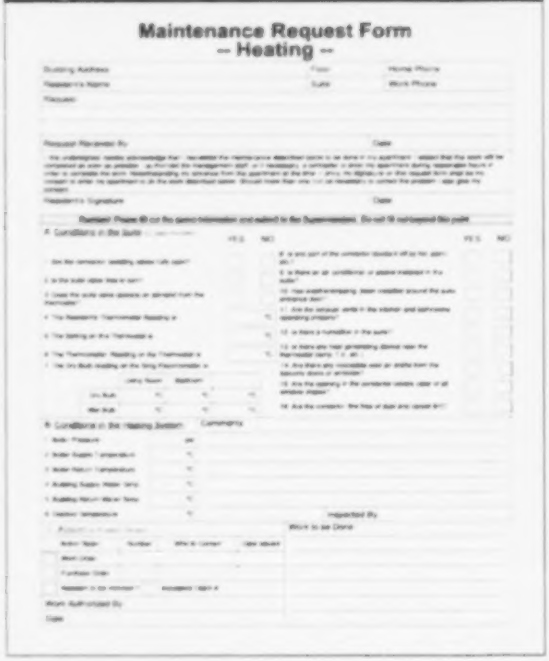
Upon receiving a Maintenance Request Form, the Superintendent should evaluate the urgency of the request and, when appropriate investigate the problem to determine course of action. If the Superintendent or other site staff has the time and ability to solve the problem themselves, they should proceed to do so and write the results on the ***Maintenance Request Form***. The completed form is forwarded to the property manager for filing.

If the site staff cannot resolve the problem, they should forward the ***Maintenance Request Form*** to the property manager. In very large property management companies, management can turn the ***Maintenance Request*** into a ***Work Order*** for the internal mechanics or electricians. However, at this point, most property managers will either:

- Issue a ***Work Order*** to the service contractor if the work falls under the contract terms.
- In the case of large jobs, obtain three price quotes and issue a Purchase Order to the chosen contractor.

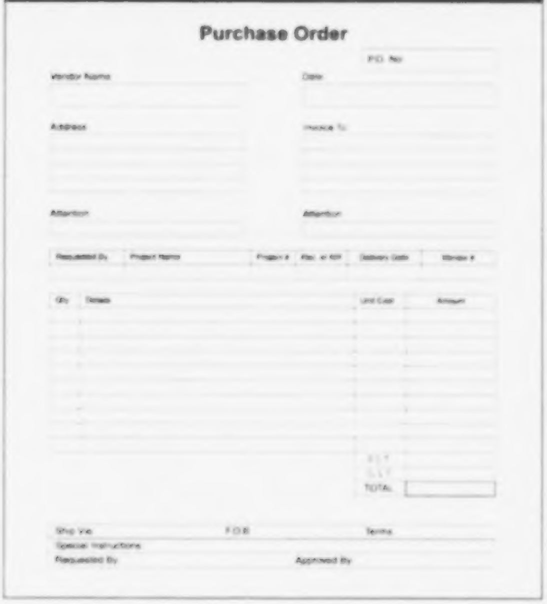
An outside contractor should conform to the record keeping system by using the ***Maintenance Request Form*** to clearly report on the results.

Figure 4.3: Maintenance Request Form – Heating



Maintenance Request Form
– Heating –

Figure 4.4: Purchase Order



Purchase Order

P.O. No

Vendor Name

Date

Address

Invoice To

Attention

Attention

Requested By | Project Name | Project # | Delivery Date

Qty | Details | Unit Cost | Amount

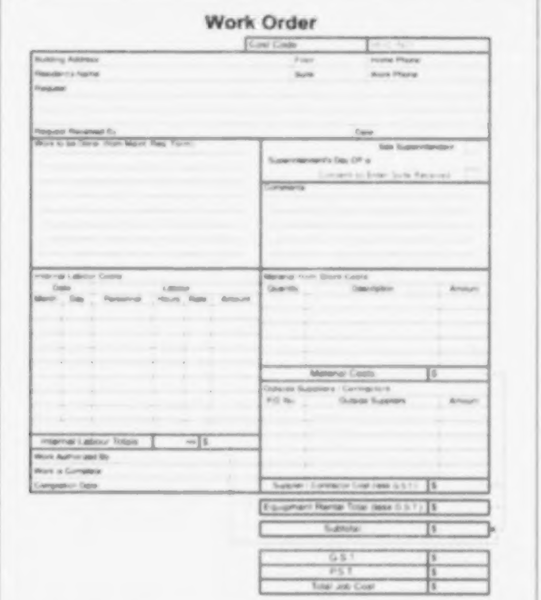
TOTAL

Ship Via | F.O.B. | Terms

Special Instructions

Requested By | Approved By

Figure 4.5: Work Order



Work Order

Cost Code

Building Address | Floor | Home Phone

Resident's Name | Suite | Work Phone

Request

Request Received By | Date

Work to be Done (from Maint. Req. Form)

Site Superintendent

Superintendent's Day Off is

Consent to Enter Suite Received

Comments

Internal Labour Costs

Date | Labour

Month | Day | Personnel | Hours | Rate | Amount

Material from Stock Costs

Quantity | Description | Amount

Material Costs | $

Outside Suppliers / Contractors

P.O. No. | Outside Suppliers | Amount

Internal Labour Totals | $

Work Authorized By

Work is Complete

Completion Date

Supplier / Contractor Cost (less G.S.T.) | $

Equipment Rental Total (less G.S.T.) | $

Subtotal | $

G.S.T. | $

P.S.T. | $

Total Job Cost | $

Copies of the ***Maintenance Request Form***, ***Work Order***, and ***Purchase Order*** are located at the end of this chapter.

4.1.1 Handling Maintenance Requests

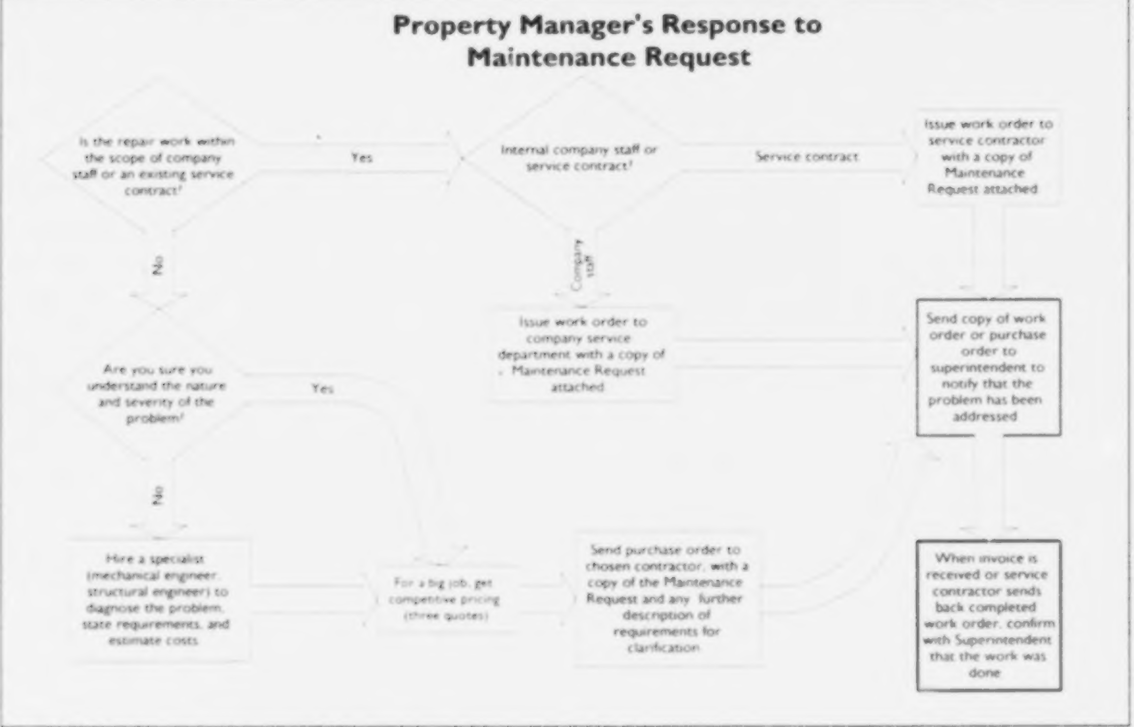
When a maintenance problem is detected, the building Superintendent or other site staff will investigate and proceed to solve the problem where possible. Management will receive a completed ***Maintenance Request Form*** that identifies the originator and details both the problem and the solution.

It is good practice to keep the tenant apprised of work progress, especially in respect to items that are bothersome to the tenant. The tenant is a customer, and should be treated as such. If there must be a delay in resolving a maintenance request, the occupant should be informed of the delay and the reason. This will reduce repeated complaints. Maintenance requests affecting others in the building should be posted to inform all building occupants that management is aware of the problem and it is being dealt with.

Frequently, the site staff will be unable to solve the problem and the associated ***Maintenance Request Form*** will arrive incomplete. The solution is left to the property manager.

In this case, the following actions are recommended:

Figure 4.6: Property Manager's Response to Maintenance Request


Property Manager's Response to Maintenance Request
Is the repair work within the scope of company staff or an existing service contract?
Yes
No
Internal company staff or service contract?
Service contract
Company staff
Issue work order to service contractor with a copy of Maintenance Request attached
Issue work order to company service department with a copy of Maintenance Request attached
Are you sure you understand the nature and severity of the problem?
Yes
No
Send copy of work order or purchase order to superintendent to notify that the problem has been addressed
Hire a specialist (mechanical engineer, structural engineer) to diagnose the problem, state requirements, and estimate costs
For a big job, get competitive pricing (three quotes)
Send purchase order to chosen contractor, with a copy of the Maintenance Request and any further description of requirements for clarification
When invoice is received or service contractor sends back completed work order, confirm with Superintendent that the work was done

The property manager must set standards with respect to how fast Maintenance Request Forms are dealt with by the onsite staff. The following three levels can be used to define the level of urgency for each maintenance request:

1. Maintenance Requests designated "**Service Required**" are the lowest level of urgency. They can be forwarded on a regular schedule, perhaps twice weekly on Mondays and Thursdays. A "**Service Required**" situation is one in which a delay of a few days will not adversely affect the building environment or result in a significant worsening of the problem. Also, it will not cause further complaint on the part of the occupants.

2. Some Maintenance Requests will be "**Urgent**", meaning that they should be forwarded the same day, or on a Monday after a weekend. Generally, "**Urgent**" situations are those that compromise tenant comfort or convenience or normal operation of the major building systems.

3. The occasional Maintenance Request will be a true "**Emergency**" requiring an immediate response. With an Emergency Maintenance Request, the Superintendent will contact the property manager any time, day or night, and the manager may end up having to call a service contractor's 24-hour dispatch without the luxury of prior investigation or pricing comparison.

In the event that the Superintendent cannot reach the property manager, he must have the authority to call for qualified help. Emergency situations represent a risk to human safety or a risk of serious building or equipment damage.

Numerous Maintenance Request scenarios requiring immediate decision and action from the manager are identified in ***Figure 4.7: Maintenance Request Scenarios***. The following classifications help to direct the site staff in following the proper course of action.

Figure 4.7: Maintenance Scenarios

Operations Manual for Maintenance & Custodial Staff	Dealing With	Situation / Action	Category
SECTION 2: HOUSEKEEPING			
2.4	Pest Control	Pests are becoming a serious problem. Requires landscaper or lawn care company	Service Required
2.6	Apartment Cleaning - Housekeeping	Repainting or repair of walls or ceilings	Service Required
SECTION 3: GROUNDSKEEPING			
3.1.1	Grounds keeping Safety	Icicles are constantly forming on eaves or other overhangs, indicative of improper insulation or poor attic air flow	Service Required
3.4	Weed Control	Weeds are becoming too prevalent to remove by hand, requiring a lawn care company	Service Required
3.5	Plant Diseases, Insects and Pests	Pests and/or disease are infesting grounds and plants. Requires landscaper or lawn care company	Service Required
SECTION 4: STRUCTURAL, ARCHITECTURAL AND HARDWARE			
4.2.1	Foundation Wall Hairline Cracks	Active hairline crack in foundation (crack is expanding). Requires assessment by a structural specialist.	Service Required
4.2.1	Foundation Wall Hairline Cracks	Dormant hairline crack in foundation, not exposed to moisture or abrasive. Requires building envelope specialist to apply correct caulking.	Service Required
4.2.1	Foundation Wall Hairline Cracks	Dormant hairline crack in foundation, exposed to water and/or abrasive. Requires protective coating by building envelope specialist	Service Required
4.2.2	Concrete Slab-On-Grade Cracks	Large structural cracks found in slab-on-grade floor, requiring analysis by a structural engineer	Service Required
4.2.3	Concrete Suspended Slab Cracks	Cracks found in suspended slabs, requiring analysis by a structural engineer.	Urgent
4.2.4	Concrete Floor Slab Sinking	Usually due to compacting of soil underneath the slab. Requires inspection by a structural engineer	Service Required
4.2.5	Water Leakage Into Basement	Water is condensing on walls in the basement, damaging the concrete. Requires assessment by a mechanical engineer (humidity removal and control)	Service Required
4.2.5	Water Leakage Into Basement	The leaking has been carefully investigated and the source has not been discovered or is not easily fixed.	Service Required
4.3.2	Cracks in Above Grade Walls	Exterior patching required to prevent deterioration from moisture penetration	Service Required
4.3.2	Cracks in Above Grade Walls	Settlement cracks (caused by foundation settling) should be repaired by a mason	Service Required
4.4.1	Built Up Roof - Exposed Bitumen	So many areas are exposed that re-roofing may be required. Have a roofer examine the roof.	Service Required
4.4.1	Built Up Roof - Blisters	Have a roofer repair the blisters.	Service Required
4.4.1	Built Up Roof - Splits	Have a roofer repair the split in the roof membrane before more water enters the roof system.	Urgent
4.4.1	Built Up Roof - Alligatoring	Have a roofer repair the alligatoring and cover exposed areas with gravel	Service Required
4.4.2	Inverted Roof Problems	Have a roofer inspect the problem areas and give suggestions.	Service Required
4.4.3	Ponding on Roof	Roof drains are not at roof low points, requiring installation of more roof drains	Service Required
4.5.2	Garbage Compactor Malfunction	Repair is beyond the site staff capability. Requires electrical contractor	Service Required
4.5.3	Garbage Compactor Operating Dangerously	Repair is beyond the site staff capability. Requires electrical contractor.	Urgent
4.6.1	Elevator Operating Problems	Contact service contractor for repair	Urgent

Figure 4.7: Maintenance Scenarios

SECTION 5: ELECTRICAL & APPLIANCES			
5.4.2	Wall Outlet Failure	Contact electrician for repair.	Service Required
5.6	Ground Fault Interrupter Failure	Ground fault interrupter has been tested and is not working. This is a safety hazard if not addressed.	Urgent
5.7	Motor Problems	Superintendent has detected operating problems with a motor (pump, fan . . .). Action depends on the exact nature of the problem, but generally would require an electrician.	Urgent
5.8	Appliances	Major appliance problem. Requires an appliance repair technician.	Service Required
5.8.1	Refrigerators and Freezers - Unit Won't Run	Superintendent has gone through basic checkout, and unit is not working. Requires an appliance repair technician.	Service Required
5.8.1	Refrigerators and Freezers - Unit runs with Inadequate Temperatures	Superintendent has gone through basic checkout. Requires an appliance repair technician.	Service Required
5.8.1	Refrigerators and Freezers - Excessive Running Time	The unit is very noisy and runs for long periods. Requires an appliance repair technician.	Service Required
5.8.1	Refrigerators and Freezers - Excessive Frost Accumulation	Door adjustment and seal replacement have not fixed the problem (exessive air exchange). Requires an appliance repair technician.	Service Required
5.8.2	Electric Range - Oven Will Not Heat	Superintendent has checked for all the most common problems. Requires an appliance repair technician.	Service Required
5.8.2	Electric Range - Oven Not Heating Properly	Superintendent has checked for all the most common problems and has replaced the heating element. Requires an appliance repair technician.	Service Required
5.8.2	Electric Range - Element Will Not Heat	Superintendent has checked for electrical continuity, fuses, control dial, and has replaced the element. Requires an appliance repair technician.	Service Required
5.8.4	Clothes Dryer - Machine Won't Run	Superintendent has checked the most common electrical problems. Requires an appliance repair technician.	Service Required
5.8.4	Clothes Dryer - Machine Runs But Won't Continue	Superintendent has checked fuses and breakers. Requires an appliance repair technician.	Service Required
5.8.4	Clothes Dryer - Machine Runs But Does Not Dry Clothes	Superintendent has checked lint trap and exhaust duct, and for overloading. Requires an appliance repair technician.	Service Required
5.8.4	Clothes Dryer - Drum Will Not Rotate	Superintendent has checked for obstruction and common drum drive problems. Requires an appliance repair technician.	Service Required
5.8.5	Clothes Washer - Machine Won't Run	Superintendent has checked for common electrical problems. Requires an appliance repair technician.	Service Required
5.8.5	Clothes Washer - Machine Fills but Doesn't Start	Agitator motor is not running. Requires an appliance repair technician.	Service Required
5.8.5	Clothes Washer - Machine Fills but Doesn't Start	Motor is running, and "suds lock" control is ruled out. Requires an appliance repair technician.	Service Required
5.8.5	Clothes Washer - Machine Leaks	Leak is coming from the machine itself, not the hoses. Requires an appliance repair technician.	Service Required
5.9	Television Reception	Vertical series of suites is getting poor reception, implicating a suite riser. Call cable company if cable-connected, otherwise contact electronic repair specialist.	Service Required
5.9	Television Reception	Specific suite or entire building is getting poor reception. Call cable company if cable-connected, otherwise contact electronic repair specialist.	Service Required

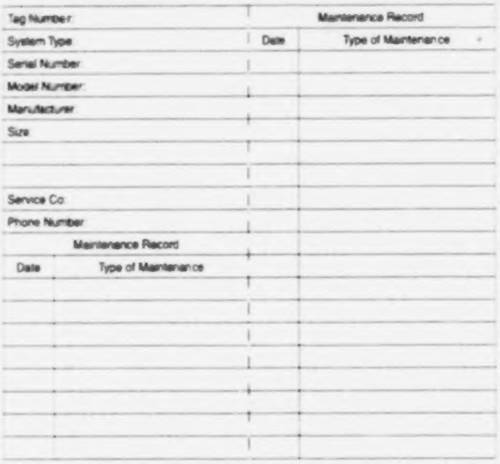
Figure 4.7: Maintenance Scenarios

SECTION 7: PLUMBING & DRAINAGE			
7.2.3	Wall Mounted Faucets - Leaking	Superintendent has taken apart the unit and has cleaned or replaced problem parts. Futher work requires a plumber.	Service Required
7.2.3	Wall Mounted Faucets - Tub-Spout Diverters	Tub spout diverter needs to be replaced, but the Superintendent could not remove it without causing other damage. Requires a plumber	Service Required
7.3.2	Water Closet Does Not Flush	Some sort of blockage outside of the water closet is preventing water from entering. Requires a plumber.	Urgent
7.4.1	Clogged Toilets - Removing the Bowl	The Superintendent is unable or uncertain about removing a toilet bowl. Have a plumber do it with the Superintendent helping so he/she can do it next time.	Urgent
7.4.2	Clogged Basin and Sink Drain	The Superintendent has used all tools and taken all reasonable steps to unclog the basin. Requires a plumber.	Urgent
7.4.3	Clogged Floor Drains and Shower Drains	The Superintendent has tried an auger or snake and has also tried pressurization with a garden hose. Requires a plumber.	Urgent
SECTION 8: HEATING, COOLING & VENTILATION			
8.1.1	General Safety Measures	Excessive fan vibration observed. Requires a mechanical contractor.	Urgent
8.2.3	Heating System Inspection - Low System Pressure	The Superintendent has checked for and may have found leaks in the heating water distribution piping. Requires a mechanical contractor.	Urgent
8.2.3	Heating System Inspection - High System Pressure	High pressure persists even though the Superintendent has checked the cushion tank and the makeup pressure regulating valve. Requires a mechanical contractor.	Urgent
8.2.3	Heating System Inspection - Incorrect Boiler Water Temps	The Superintendent has gone through a check on the boiler and controls. Requires a mechanical contractor.	Urgent
8.2.3	Heating System Inspection - Incorrect Bldg Loop Temps	The Superintendent has checked the operation of pumps, valves, and controls associated with loop temperature. Requires a mechanical or controls contractor.	Urgent
8.3.1	Chiller	Chiller operating problems. Requires a licensed, qualified refrigeration mechanic familiar with the type of chiller in your building.	Urgent
8.3.2	Cooling Tower	Tower is unable to maintain condenser water at a low enough temperature. Superintendent has checked the operation of controls and tower components. Requires a mechanical contractor.	Urgent
8.3.3	D/X Systems - Inadequate air flow	Superintendent has checked fan operation, fire dampers, filters, but the low air flow persists. Requires a mechanical contractor.	Service Required
8.3.3	D/X Systems - Inadequate cooling	Requires a qualified refrigeration mechanic.	Service Required
8.3.3	D/X Systems - Other problem	Would usually require a qualified refrigeration mechanic.	Service Required
8.4	Suite Equipment - Heating or cooling problem with a fan coil unit	Superintendent has done initial diagnosis. Requires a mechanical contractor.	Service Required
8.4	Suite Equipment - Heating or cooling problem with an incremental unit	Superintendent has done initial diagnosis. Requires a mechanical contractor.	Service Required
8.4	Suite Equipment - Heating problem with a baseboard heater	Superintendent has done initial diagnosis. Requires a mechanical contractor.	Service Required
8.6.1	Pumps - Motor failure	Superintendent has checked fuses and breakers. Requires an electrical contractor.	Emergency
8.6.1	Pumps - Seized pump shaft	Requires a mechanical contractor.	Emergency
8.6.1	Pumps - Leaking seals and gaskets	Requires a mechanical contractor.	Service Required
8.6.2	Valves - Blending valve problem	Superintendent has done initial diagnosis. Requires a mechanical contractor.	Urgent
8.8.3	Thermostat / Aquastat	Not controlling properly. Superintendent has done initial diagnosis. Requires a mechanical or controls contractor.	Urgent
8.8.4	Stand Alone Controller	Not controlling properly. Superintendent has done initial diagnosis. Requires a controls technician familiar with the specific equipment.	Urgent
8.8.8	Maintenance of Motorized Valves	The valve is stuck open or stuck shut. Requires a mechanical or controls contrator.	Service Required

4.2 Equipment Tags

Major mechanical/electrical equipment should be tagged for identification and to provide on-the-spot service history *(Figure 4.8)*. Equipment tagging is a simple process, and goes a long way to prevent problems and to help diagnose problems when they occur. A tagging system can be set up as follows:

Figure 4.8: Equipment Tag Example



Tag Number		Maintenance Record	
System Type		Date	Type of Maintenance
Serial Number			
Model Number			
Manufacturer			
Size			
Service Co.			
Phone Number			
Maintenance Record			
Date	Type of Maintenance		

- Create copies of the equipment tags using the sample located at the end of this chapter, and cut them to size. Identify each tag using a unique code for each one. Use letters to identify equipment type, and numbers to separate similar pieces of equipment. For example, pumps labelled HP1 and HP2 could indicate two heating pumps. B1 might be used to label one of two boilers.
- Put the tags in 8.9 cm x 13.3 cm (3-1/2" x 5-1/4") plastic pouches, available at stationery supply stores.
- Punch holes in the tag pouches and fasten in a safe spot close to each piece of equipment using metal shower curtain rings.
- Have the staff and contractors record major maintenance procedures on these tags. When a tag is eventually filled, start another and put in the same pouch. Do not throw out the old tags.

4.3 Mechanical/Electrical Service Contracts

Mechanical and electrical services can be separate or included in a single contract. Administratively, it is easier to tender and manage a single contract. The bulk of the work will be mechanical, so it is important to check the mechanical experience and credentials of all invited bidders. However, if electrical work is to be included in the same contract, confirm that the bidders have journeyman electricians on staff. Some contractors may want to subcontract the electrical portion. Involving a subcontractor can cause unacceptable response delays when problems arise, especially in electrically heated buildings.

4.4 Maintenance Issues

The majority of common maintenance items are addressed in detail in the **Operations Manual for Maintenance and Custodial Staff**. This manual should be kept on site for reference purposes.

Some maintenance items will require more direct involvement of the Property Manager. Several of these are covered here.

4.4.1 Parking Garage Deterioration

Description: Concrete parking garage deterioration is primarily caused by corrosion of the reinforcement bars. The iron reinforcement bars rust because of contact with road salt and moisture. The rust expands the reinforcement bars, causing the concrete to crack and split. Only qualified experts in the repair of parking garage structures should make decisions regarding the extent (seriousness) of the problem and the recommended solution.

Action

1. Determine location of sacrificial anodes. Check periodically and replace as necessary.
2. Inspect parking garage floor drains (above and below slabs) and clean as necessary.
3. Wash parking garage floor surfaces with water.
4. Maintain adequate ventilation of the parking garage.
5. Avoid storing salt or salt/sand mixtures on garage floors.
6. A qualified professional should carry out annual inspections.

4.4.2 Switchgear

All electrical switchgear should be checked and connecting fasteners tightened regularly to ensure proper functioning and to prevent overheating. Overheating of switchgear can result in a fire and a failure of electrical service. Routine checks are an inexpensive form of insurance.

Preventative Action by the Property Manager:

Action

1. Have all fasteners within the main electrical service switchgear (switches and breakers) over 220 Amps tightened annually by an electrician.
2. Have thermographic scans performed annually by a qualified technician on all switchgear and breakers located in electrical rooms and panels outside of the suites. Heating of electrical connections and components is caused by oxidation, overload, unbalanced load and other factors. An electrician should deal with all problems revealed by inspections immediately.
3. Ensure that all insulating (non-metal) surfaces are kept clean and free of dust to prevent electrical breakdowns.
4. Ensure that all circuit breakers are exercised (switched on/off) and mechanical components of electrical devices, such as disconnect switches are properly lubricated after cleaning.

4.4.3 Swimming Pools

The major components of a swimming pool are:

1. The pool shell and possibly a pool liner.
2. The functional equipment in, and around, the pool such as ladders, underwater lights, life rings, and diving boards.
3. The water treatment system for filtering, heating (where installed), and the chemical treatment of pool water.

4. The maintenance equipment for removing dirt and debris from the pool surface, walls, and floors.

5. In-door pool ventilation or dehumidification system.

Standard safety equipment should include:

- Life rings and life hook(s)
- Life guard chair(s)
- Rope floats, cup anchors and rope hooks for safety lines
- Ground fault detectors for underwater lights
- Signs, Pool Phone and First Aid Kit

Routine maintenance includes *chemical treatment, cleaning* and *equipment maintenance.* For a typical multi-unit residential pool, this should be done three times a week. If the pool is heavily used, or the pool is just being opened (outdoor pool), maintenance should be performed more frequently. If the pool is rarely used, the maintenance can be performed two times a week.

Because of the complexity of pool chemistry the maintenance of the pool should be done by an outside contractor specializing in pools. If this is not possible or practical, one person on staff should be designated in charge of the pool; that staff member should also be trained in pool maintenance.

Proper ventilation and humidity control for an indoor pool is very important in maintaining the structural integrity of the pool area. High humidity levels can result in rotting and mildew around windows, crumbling of exterior brick, etc. If water is condensing on windows, walls and doors, it is important to consult with a heating, ventilation and air conditioning (HVAC) expert.

4.4.4 Backflow Preventers

Description: Backflow preventers are used on a supply water line whenever there is a risk of contamination of potable water. They are typically placed in the supply water or make-up water line leading to a pool, heating/cooling loop, cooling tower, fire sprinkler system, irrigation sprinkler system, hose bibs, sanitary systems, etc. They prevent contaminated water from backing up into the potable water system of the building. As the health and safety of the building occupants depend on any backflow preventers that are installed in the building, the property manager must ensure that they are in good working order at all times.

Backflow preventers must be tested in accordance with the CSA Standard ***CAN/CSA-B64.10-94 Manual for the Selection, Installation, Maintenance, and Field Testing of Backflow Prevention Devices.*** A qualified contractor must undertake this work.

Action

1. Upon installation, have a *Certified Backflow Prevention Device Tester* verify the backflow preventer.

2. Upon cleaning, repairing or overhauling, have a *Certified Backflow Prevention Device Tester* verify the backflow preventer.

3. Upon relocation, have a *Certified Backflow Prevention Device Tester* verify the backflow preventer.

4. Have a *Certified Backflow Prevention Device Tester* verify all backflow preventers on an annual basis.

For detailed requirements, refer to the CSA Standard, available from the Canadian Standards Association.

4.4.5 Annual Maintenance on Boilers

Description: Gas-fired heating boilers should be cleaned and checked every two years. Oil-fired boilers should be cleaned and checked annually. Electric boilers that supply domestic hot water should also be checked and cleaned every two years. Exact cleaning tasks will depend on the type of boiler, but generally surfaces in contact with water should be de-scaled. Surfaces in contact with flame or gases are to be cleaned of combustion deposits. Any suites that will be without hot water due to inspections and repairs should be notified of the date and time of the maintenance and the expected time that service will resume.

Action

1. During the summer months, have the space heating boilers serviced as follow:
    - Have the burners, the heat exchange surfaces and the stack cleaned thoroughly. Soot can be a source of a fire. Also, residue left on the heat exchange surface can drastically reduce the efficiency of the boiler thereby increasing the costs of heating the building.
    - Have all safety devices including high limit controls, fire safeties, spark ignition and pilot light systems, gas valves, etc. inspected and checked for proper working order.
    - Have the symmetry and colour of the burner flame (forced draft) checked, and have the refractory, burner fan, primary air, burner blower, secondary air linkages, etc. inspected.

2. During the winter months (preferably January), have the boilers tested for efficiency by a qualified technician.

3. Have the water condition tested to ensure that the water treatment system is operating correctly. Poor water conditions can cause premature deterioration of the boiler heat exchange surfaces.

4.4.6 Heating and Cooling Coil Maintenance

The cleanliness of the coils in fan-coil units should be checked as frequently as necessary to ensure efficient system performance. Locate coils by identifying water or refrigerant piping entering the side of the air handler. Clogged coils restrict airflow, and reduce air delivery to the areas served. This reduces occupant comfort and incurs complaints. It also increases space heating and cooling costs. Additionally, dirt insulates the coil surface, reducing system heating or cooling capacity. Therefore, the coils must be kept as clean as possible at all times. As this is a specialized field, it is recommended that a qualified contractor perform coil maintenance.

Preventative Actions by the Property Manager

Action

1. Have all air handling unit coils inspected twice a year and cleaned when required.

2. Have all heat exchangers inspected twice a year and cleaned when required.

For more details on boiler maintenance see ***Section 8: Heating, Cooling and Other Mechanical Systems of Operations Manual for Maintenance and Custodial Staff.***

4.4.7 Envelope Deterioration

Description: Over time, the exterior of the building can become discoloured, damaged, and may weaken. Caulking can split and crack, paint can fade and peel, masonry can deteriorate. The exact nature of the deterioration will depend on the type of material and prevailing environmental conditions, but may include:

- Discoloration and brittleness from ultraviolet (sunlight) exposure
- Wearing from exposure to abrasives (blowing sand or dirt)
- Chemical wear from pollutants such as acidic rainfall
- Moisture damage: spalling of bricks from water penetration and freeze/thaw cycles

The failure of the building envelope to prevent the ingress of moisture (rain, sleet, snow and even moist air from the interior of the building) can cause the deterioration of the building's structure and interior finishes. Mold growth generally results and this, in turn, can affect occupants' health and comfort. Building envelope leakage problems should be treated as urgent. Fortunately, with proper surveillance, small building envelope problems can usually be detected and fixed before larger problems occur.

Preventative Actions by the Property Manager

Action

1. Schedule a careful inspection of the building exterior with the superintendent, at least once per year and preferably in the spring. Note any apparent deterioration of exterior elements particularly those that could result in water leakage into the building. Any problem areas should be referred to a building envelope consultant or the appropriate trade.

2. Plan corrective measures based on the seriousness of the situation. Make use of specialty building envelope consultants, contractors and suppliers to become familiar with the nature of any problems and the proper actions to take.

3. Encourage on-site staff and occupants to report water leakage problems immediately. This will go a long way in controlling the extent of the repairs required to fix the problem.

4.4.8 Appliances

Description: In rental buildings, it is often the owner's responsibility to maintain appliances. In a typical rental situation this means the building owner will supply and service the stove, refrigerator and central laundry appliances. Each tenant will take responsibility for his/her personal appliances.

Service Technician

Often, the Superintendent's investigation will lead to the need to call a service technician. In-suite appliance service should be handled on an as-needed basis. Central laundry can be handled as needed or under a service contract. Develop a good relationship with an experienced appliance technician by checking tenant satisfaction with the repair work and paying bills promptly.

Spare Refrigerators

It is a good policy to keep one spare refrigerator on site per 50 in use. Refrigerator breakdowns are relatively frequent and more disruptive than failure of other appliances.

forms for chapter 4.0- structural/mechanical/ electrical maintenance

Maintenance Request Form
-- Heating --

Building Address:	Floor:	Home Phone:
Resident's Name:	Suite:	Work Phone:

Request:

Request Received By: Date:

I, the undersigned, hereby acknowledge that I requested the maintenance described below to be done in my apartment. I expect that this work will be completed as soon as possible. I authorized the management staff, or if necessary, a contractor to enter my apartment during reasonable hours in order to complete the work. Notwithstanding my absence from the apartment at the time of entry, my signature on this request form shall be my consent to enter my apartment to do the work described below. Should more than one visit be necessary to correct the problem I also give my consent.

Resident's Signature: Date:

Resident: Please fill out the above information and submit to the Superintendent. Do not fill out beyond this point.

A. Conditions in the Suite (by Superintendent)

	YES	NO
1. Are the convector isolating valves fully open?	☐	☐
2. Is the suite valve free to turn?	☐	☐
3. Does the suite valve operate on demand from the thermostat?	☐	☐
4. The Resident's Thermometer Reading is:	°C	
5. The Setting on the Thermostat is:	°C	
6. The Thermometer Reading on the Thermostat is:	°C	

7. The Dry Bulb reading on the Sling Psychrometer is:

	Living Room	Bedroom	
Dry Bulb	°C	°C	°C
Wet Bulb	°C	°C	°C

	YES	NO
8. Is any part of the convector blocked off by foil, paint, etc.?	☐	☐
9. Is there an air conditioner or sleeve installed in the suite?	☐	☐
10. Has weatherstripping been installed around the suite entrance door?	☐	☐
11. Are the exhaust vents in the kitchen and bathrooms operating properly?	☐	☐
12. Is there a humidifier in the suite?	☐	☐
13. Is there any heat generating device near the thermostat (lamp, T.V., etc.)	☐	☐
14. Are there any noticeable cold air drafts from the balcony doors or windows?	☐	☐
15. Are the opening in the convector covers clear of all window drapes?	☐	☐
16. Are the convector fins free of dust and carpet lint?	☐	☐

B. Conditions in the Heating System

1. Boiler Pressure	psi
2. Boiler Supply Temperature	°C
3. Boiler Return Temperature	°C
4. Building Supply Water Temp.	°C
5. Building Return Water Temp.	°C
6. Outdoor Temperature	°C

Comments:

Inspected By.

C. Action (by Property Manager)

Action Taken	Number	Who to Correct	Date Issued
☐ Work Order			
☐ Purchase Order			

☐ Resident to be Invoiced ? ☐ Insurance Claim #:

Work Authorized By:

Date:

Work to be Done:

Maintenance Request Form
-- Rainwater Infiltration --

Building Address:	Floor:	Home Phone:
Resident's Name:	Suite	Work Phone:

Request:

Request Received By: Date:

I, the undersigned, hereby acknowledge that I requested the maintenance described below to be done in my apartment. I expect that this work will be completed as soon as possible. I authorized the management staff, or if necessary, a contractor to enter my apartment during reasonable hours in order to complete the work. Notwithstanding my absence from the apartment at the time of entry, my signature on this request form shall be my consent to enter my apartment to do the work described below. Should more than one visit be necessary to correct the problem I also give my consent.

Resident's Signature: Date:

Resident: Please fill out the above information and submit to the Superintendent. Do not fill out beyond this point.

A. Conditions in the Suite (by Superintendent)

1. Which room is it leaking in?

2. Where is the leak in the Room? Under Window ☐ Above Window ☐ Sides of Windows ☐ At Floor Level ☐
In Corner of Suite ☐ In Closet ☐ At Ceiling ☐
On Wall with no Windows ☐ Outside Wall ☐ Inside Wall ☐

3. Which direction is the leaking area facing? East ☐ West ☐ North ☐ South ☐

4. Was there enough water to warrant using A Wet Vacuum ☐ A Mop ☐ A Cloth ☐

5. Is the leaking near hydronic piping/radiators? Yes ☐ No ☐

6. Is this the first report of problems? Yes ☐ No ☐

7. Does leak occur every time it rains? Yes ☐ No ☐

8. Is the leak near an air conditioning unit? Yes ☐ No ☐

9. Is the condensate drain pan full? Yes ☐ No ☐

10. Are there any uninsulated refrigerant lines? Yes ☐ No ☐

B. Inspection Comments: (by Superintendent)

Inspected By:

C. Expert's Comments:

Inspected By:

D. Action (by Property Manager)

	Action Taken	Number	Who to Correct	Date Issued
☐	Work Order			
☐	Purchase Order			

☐ Resident to be Invoiced ? ☐ Insurance Claim #

Work Authorized By:

Date:

Work to be Done:

Maintenance Request Form
-- General --

Building Address:	Floor:	Home Phone:
Resident's Name:	Suite:	Work Phone:

Request:

Request Received By: Date:

I, the undersigned, hereby acknowledge that I requested the maintenance described below to be done in my apartment. I expect that this work will be completed as soon as possible. I authorized the management staff, or if necessary, a contractor to enter my apartment during reasonable hours in order to complete the work. Notwithstanding my absence from the apartment at the time of entry, my signature on this request form shall be my consent to enter my apartment to do the work described below. Should more than one visit be necessary to correct the problem I also give my consent.

Resident's Signature: Date:

Resident: Please fill out the above information and submit to the Superintendent. Do not fill out beyond this point.

A. Conditions in the Suite

Inspected By: Date:

B. Action Taken to Fix Problem

Problem Corrected By: Date:

C. Recommended Action Required

Recommended By: Date:

D. Property Manager

Action Taken	Number	Who to Correct	Date Issued
☐ Work Order			
☐ Purchase Order			
☐ Resident to be Invoiced ?	☐ Insurance Claim #		

Work Authorized By:

Date:

Work to be Done:

Purchase Order

P.O. No:

Vendor Name:

Date:

Address:

Invoice To:

Attention:

Attention:

Requested By	Project Name	Project #	Rec. or NR	Delivery Date	Vendor #

Qty	Details	Unit Cost	Amount
		P.S.T.	
		G.S.T.	
		TOTAL	

Ship Via: F.O.B. Terms:

Special Instructions:

Requested By: Approved By:

Tag Number:	
System Type:	
Serial Number:	
Model Number:	
Manufacturer:	
Size:	
Service Co:	
Phone Number:	
Maintenance Record	
Date	Type of Maintenance

Maintenance Record	
Date	Type of Maintenance

Tag Number:	
System Type:	
Serial Number:	
Model Number:	
Manufacturer:	
Size:	
Service Co:	
Phone Number:	
Maintenance Record	
Date	Type of Maintenance

Maintenance Record	
Date	Type of Maintenance

Work Order

Cost Code:
W.O. NO:

Building Address:
Floor:
Home Phone:
Resident's Name:
Suite:
Work Phone:

Request:

Request Received By:
Date:

Work to be Done: (from Maint. Req. Form)

See Superintendent ☐

Superintendent's Day Off is:

Consent to Enter Suite Received ☐

Comments:

Internal Labour Costs:

Date		Labour			
Month	Day	Personnel	Hours	Rate	Amount

Internal Labour Totals:	hrs	$

Work Authorized By:
Work is Complete:
Completion Date:

Material from Stock Costs:

Quantity	Description	Amount

Material Costs:	$

Outside Suppliers / Contractors:

P.O. No.	Outside Suppliers	Amount

Supplier / Contractor Cost (less G.S.T.):	$
Equipment Rental Total (less G.S.T.):	$
Subtotal:	$

G.S.T.	$
P.S.T.	$
Total Job Cost	$

SECTION 5.0

utilities

5.0 Utilities

Fuel, electricity and water are costs that must be budgeted, monitored, and controlled. A basic monitoring system is easy to implement. It provides a means of annual budgeting, and will help to identify areas of excessive utility use where action can be taken.

5.1 Utility Bills

It is necessary to understand the different components of utility costs before they can be monitored and controlled. Utility costs are usually based on the level, and sometimes the time, of consumption. Several costs, such as transportation and metering, are fixed. Understanding how utility bills are structured can often make it easier to understand how utility costs can be reduced.

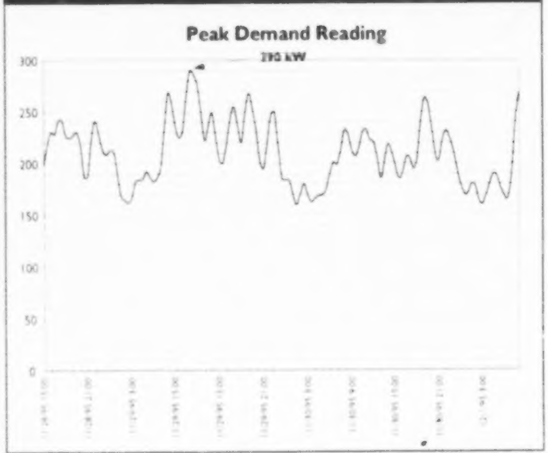
5.1.1 Electric Bill

The cost of electricity is based on many factors. The following factors will affect billing amounts:

- *Utility Rate Structure:* Rate structures can be obtained by contacting the local utility company. The rate structures vary greatly from one utility to the next, and it is necessary to understand this structure to make educated decisions on energy conservation measures. For example, an electricity demand reducing strategy makes sense in a Toronto building (marginal demand rate of $13.42 per kW), while it might not make sense in a building five minutes away in North York (marginal demand rate of $5.35 per kW).
- *Electrical Consumption:* The electrical consumption is the amount of energy used per reading period and is measured in kilowatt-hours (kWh). For example, if ten 100W light bulbs were on for five hours, the electrical consumption would be 5,000 watt-hours (10x100x5) or five kWh.
- *Demand Reading:* The demand reading is a measure of the peak electrical draw during the reading period, and is measured in kilowatts (kW). The demand peak occurs at that point during the billing month when the greatest amount of electrical equipment is operating. Utility companies charge for demand on larger services because demand reflects the generating and distribution capacity that they must make available to serve the site.

This* Peak Demand Reading Chart *shows a peak demand reading of 290 kW for the measured period.

Figure 5.1: Peak Demand Reading Chart



- *Kilo volt Ampere Reading:* Quite often there is an electrical meter in the building that is similar to the Demand Meter, but reads kilovolt Amps (kVA). Certain devices, such as motors, transformers and ballasts, constantly convert electrical power into a magnetic field, and then reconvert the magnetic field somewhat inefficiently back to electrical power. The effect this has on the system as a whole is that the amperages are higher than they need to be for a given amount of useful power delivered. The kVA reading measures the "Apparent Power" taking into account the higher amperages. It is then used to calculate the Power Factor.

- *Power Factor:* The power factor is a calculated value reflecting how effectively electrical energy delivered to the building is used. The power factor will depend on the type of electrical equipment in use—the more motors and electronic equipment, the lower the power factor and the less effectively power is being used. A power factor of 1.0 indicates very effective use of electrical energy. Most utility companies impose additional charges on buildings for having a power factor less than 0.90. Check the power factor on the bills when approving payment. If it is below 0.90, contact the utility and ask them to suggest a course of action to sort out the situation. Generally, the utility will send an inspector to check the electrical system and to recommend corrective actions.
- *Transformer Allowance:* The amount deducted from the bill if the utility company does not own the main transformer that supplies the building.

5.1.2 Fuel Bill

The fuel bill is more straightforward than the electric bill. The following factors can alter the amount of the fuel bill:

- *Consumption:* The amount of fuel used in the billing period.
- *Utility Rate Structure:* The rate structure can be obtained by contacting the supplier. The rate structures vary greatly from one building to the next, and it is necessary to understand this structure to make educated decisions on energy conservation measures. For example, a building that uses natural gas and has an Interruptible Supply agreement with the utility will have a reduced rate, but may be required to switch fuel supplies (for example, to oil or electricity) for several weeks in the winter months.

5.1.3 Water/Sewage Charge

The charge for water is similar to the charge for fuel. The following factors can vary the amount of the bill:

- *Water Use:* The amount of water used in the reading period.
- *Sewage:* The amount of sewage for the reading period. This is usually the same as the Water Consumption, but not always.
- *Utility Rate Structure:* The rate structure can be obtained by contacting the utility company.

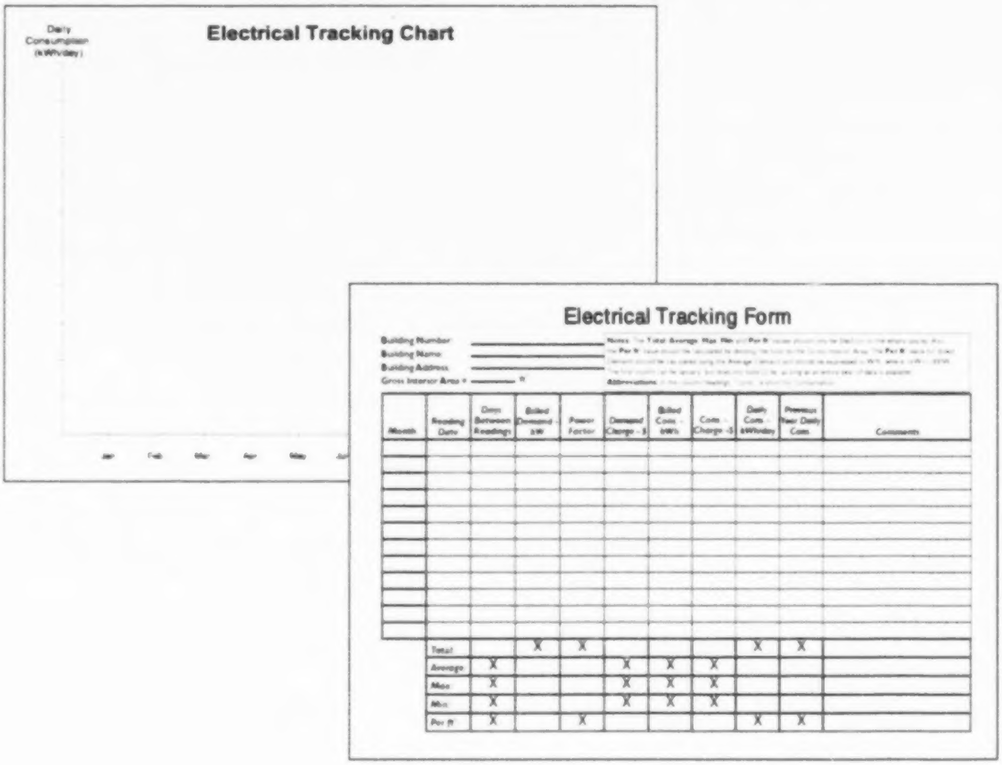
In some municipalities water is charged at a flat rate and is not based on consumption.

5.2 Utility Budgets

The energy budget should be based on the most recent available year of billing data. The utility bills contain all the information needed. If they are not readily available, the local utility company can be contacted for copies.

Samples of the ***Electrical Tracking Form, Fuel Tracking Form, and Water Tracking Form (Figure 5.2)*** can be used to establish budgets based on billing history. The three associated chart sheets will also show the expected seasonal changes in consumption. Blank versions of these forms are found at the end of this chapter.

Figure 5.2: Electrical Tracking Chart and


Daily Consumption (kWh/day)
Electrical Tracking Chart
Jan
Feb
Mar
Apr
May
Jun

Electrical Tracking Form

Building Number ____________
Building Name ____________
Building Address ____________
Gross Interior Area = ________ ft²

Month	Reading Date	Days Between Readings	Billed Demand - kW	Power Factor	Demand Charge - $	Billed Cons. - kWh	Cons. - Charge - $	Daily Cons. - kWh/day	Previous Year Daily Cons.	Comments
	Total		X	X				X	X	
	Average	X			X	X	X			
	Max	X			X	X	X			
	Min	X			X	X	X			
	Per ft²	X		X				X	X	

The electricity, fuel and water tracking forms also provide the property manager with feedback on utility use in the building.For instance, a gradual increase in water use can be detected on the chart and may indicate a leak. The property manager can confirm the proper operation of the building by tracking energy use. For instance, increased gas use during similar weather conditions may indicate the decrease in efficiency of the boilers or the increased use of windows by the occupants. Tracking energy and water use is a sound property management practice.

Shown is an example of the ***Electrical Tracking Form*** and its associated chart. The ***Fuel and Water Tracking forms*** are very similar. The purpose of these forms is to view the energy consumption history visually and establish budgets based on this historical data.

Electrical Tracking Form

The ***Electrical Tracking Form*** should be filled out using the following guidelines:

- *The Reading Date, Billed Demand, Power Factor, Demand Charge, Billed*

Consumption and Consumption Charge can be obtained directly from the bill. The *Billed Demand* and *Power Factor* may not be included on bills for smaller buildings.

- The *Days Between Readings* is the number of days between the present reading date and the previous reading date. The *Daily Consumption* can be calculated by dividing the billed consumption by the number of days.
- The ***Total, Average, Max., Min.***, and ***Per ft^2*** values should be calculated after the form is completed.
- The ***Per ft^2*** values are calculated dividing the ***Total*** electricity use for the column and by the ***Gross Interior Area***. The ***Billed Demand*** should take the ***Average*** for the column, multiply it by 1,000 and divide by the ***Gross Interior Area*** to give the number of W/ft^2.
- The ***Comments*** section of the form can be used to indicate anything that might result in an abnormal consumption or demand (for example, "Avg. Temp = -7°C", "Started Chiller", "Ramp Heater Controls failed, leaving ramp 'ON' ")
- The ***Electrical Tracking Chart*** should be filled out using the Daily Consumption. Use the Previous Year Daily Consumptions to scale the vertical axis on the chart.

Fuel Tracking Form

The ***Fuel Tracking Form*** should be filled out in the same manner as the ***Electrical Tracking Form***. The following guidelines should also be used:

- To properly compare different fuels, and get a complete picture of the energy consumption in the building, it is necessary to convert the fuel consumptions into equivalent kilowatt-hours (ekWh).

Fuel Type and Unit	Equivalent kWh Conversion (ekWh)
1 m^3 natural gas =	10.32 ekWh
1 GJ natural gas =	277.8 ekWh
1 litre fuel oil =	10.83 ekWh
1 litre propane =	7.389 ekWh

- The ***Fuel Tracking Chart*** should be filled out using the Daily Consumption. Use the Previous Year Daily Consumptions to scale the Vertical Axis on the Chart.
- For fuels such as #2 oil, fill the storage tank to the same point each time it is filled. Otherwise, the calculated consumption over the period will be incorrect.

Water Tracking Form

The ***Water Tracking Form*** should be filled out in the same manner as the ***Electrical Tracking Form***. The following guidelines should also be used:

- The ***Consumption Charge*** should include both water and sewage charges.
- The ***Water Tracking Chart*** should be filled out using the Daily Consumption. Use the Previous Year Daily Consumptions to scale the Vertical Axis on the Chart.

Typical Utility Consumptions

The following are typical energy and water consumptions for multi-residential buildings and nursing homes[1].

---

[1] Ontario Hydro - Commercial Electrical Energy Manual - Applications, *Section 1: Introduction - pg 91*

	Multi-Residential Buildings	Nursing Homes
Annual Energy Consumption - No Cooling	13 - 36 ekWh/ ft^2	13 - 36 ekWh/ ft^2
Annual Energy Consumption - Cooling	15 - 40 ekWh/ ft^2	25 - 50 ekWh/ ft^2
Peak Demand - Winter - Electric Heat	7 - 10 W/ ft^2	10 - 15 W/ ft^2
Peak Demand – Summer	2 - 4 W/ ft^2	4 - 5 W/ ft^2
Water Consumption	Approximately 0.21 m^3 water per ft^2 floor space	
CMHC HiSTAR database, average annual energy consumption	25.9 ekWh/ ft^2 (21,031 ekWh per suite)	

The broad ranges for these *typical utility* consumptions illustrate that many factors other than building area contribute to the utility use. These factors include, but are not limited to:

- Construction era. Building codes have changed to increase building envelope standards, which tend to reduce energy use. Ventilation requirements have increased, leading to possible higher costs.
- Fuel type. The cost of heat varies depending on the source. Generally electric heat is more costly than other fuels. Natural gas consumes greater amounts of kWh but in comparison to other types of fuel, costs less.
- Mechanical system selection. Some designs are more energy efficient than others.
- Lighting system selection. Some light sources use electricity more efficiently than others. As an example, a standard incandescent lamp requires about five times as much electricity to produce the same light as a comparable fluorescent lamp.
- Level of maintenance. If not maintained, mechanical equipment will become less efficient over time.
- Operating practices.
- Occupancy types. Buildings housing families consume more energy than buildings housing single persons on average.

The preceding table gives a range of comparison for two building sectors, but equipment type and operation are equally as important to the energy costs. The following are broad costing guidelines. Energy costs for a well-run multi-residential building would normally be in the range of $1.00 to $1.50 per total sq.ft. floor area per year. Electrically heated buildings and heavily air-conditioned buildings would be on the high end of this range, while buildings heated with natural gas or without air conditioning should be on the lower end. A building that costs more than $1.50 per sq.ft. for electricity and fuel annually is a good candidate for energy conservation opportunities.

Water rates vary widely. Canadians are on par very heavy users of water, so there is generally room to conserve. Depending on the location, if $200 per suite per year is spent, the situation demands serious investigation due to extremely high consumption. At $150 per suite per year, there should be several viable opportunities to save on water costs. At $100 per suite per year, there probably is not much opportunity to conserve.

When comparing utility consumptions, it is best to compare with a previous year, as opposed to comparing with a seemingly identical building.

As a real example, two high-rise condominiums built in the mid-1980s are almost identical and have these similarities:

- The same architects and engineers designed them at the same time.
- They are beside one another in Toronto.
- They have the same heating, air conditioning and ventilation systems.
- They are operated by the same property management firm, have the same on-site staff, and are maintained by the same contractors.
- Every unit in each building is sold and occupied.

With the above information, it would seem reasonable to assume that the two buildings would have similar utility consumptions. The total energy use for the one building (1992) was found to be 35.05 ekWh/ft^2, while the energy use for the second building (1992) was 24.89 ekWh/ft^2. This comparison is an excellent starting point for tracking down energy conservation (and cost saving) opportunities.

Energy used in a building can be compared to previous years. The first building had a previous year consumption of 34.44 ekWh/ft^2, with no significant operational changes from year to year. So this building is a heavy user over the long term.

If any equipment or operating changes are made, comparing energy use with previous years is the best way to gauge the effect. Where significant capital changes are being contemplated, specialist engineering firms are available to predict costs and savings and therefore minimize the investment risk.

5.3 Daily Recordings

Many multi-unit residential buildings are heated by boiler plants that deliver hot water to the perimeter of each floor. The temperature of the water is not kept constant, but is usually regulated automatically by an Indoor/Outdoor reset controller. If it is working, the controller causes hotter water to be delivered when the outside air temperature is colder. While reset controllers can save heating costs and ensure occupant comfort, there are two factors to keep in mind:

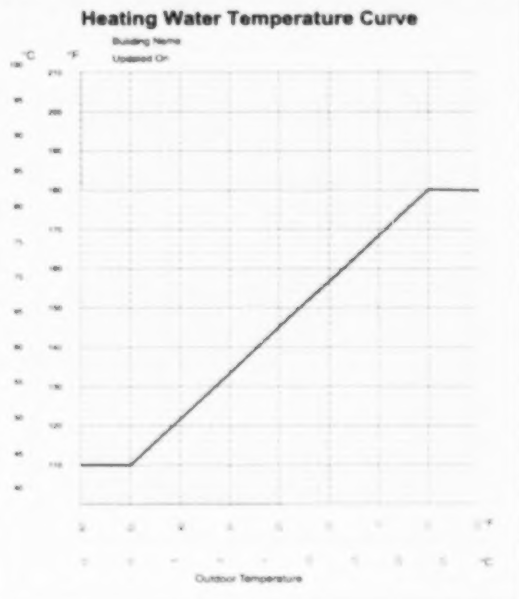
1. The correct regulation of the supply water temperature has a strong effect on fuel use.

2. Indoor/Outdoor controllers or associated elements often fail or perform poorly.

Therefore, the Superintendent should verify the performance of the reset controller by reading outside air and supply water temperatures during his *Daily Look/Listen/Touch Inspection.*

Since a 1°C reduction will result in approximately 5 per cent savings, it is crucial that these controllers work properly and accurately. The **Operations Manual for Maintenance and Custodial Staff** contains a detailed description of this control function. The method for confirming that the reset controller is set and operating correctly is provided below:

Figure 5.3: Heating Water Temperature Curve



The Heating Water Temperature Curve (Figure 5.3) and the Heating Water Control Graph (Figure 5.4) will verify the performance of the controller. Blank forms for both curves are located at the end of this chapter.

The ***Heating Water Temperature Curve*** illustrates the desired relationship between supply water and outside air. An example is shown to illustrate this relationship. Please note that the curve is not standard.

The relationship will be slightly different for each building, since a reset controller can be set to any desired relationship. Ideally it will be set to deliver the lowest possible supply water temperature under all outdoor conditions, while still satisfying tenants and operating the boiler plant without causing excessive equipment wear.

A lower curve indicates decreased energy use but increased risk of under-heating some suites. With certain piping designs, water temperatures set too low can damage some boilers. Consult a controls contractor or a mechanical engineer when determining the desired curve for the building.

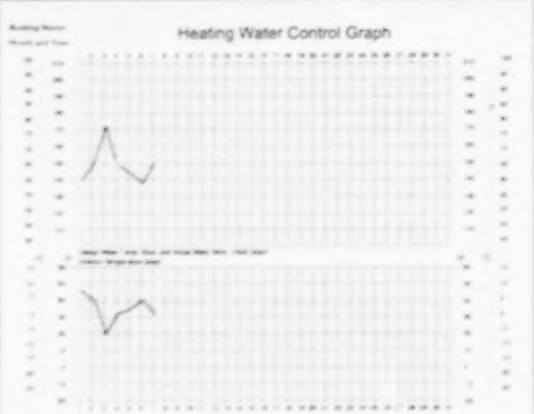
Some experimentation with the reset curve is a good idea during the first heating season. The objective is to drop supply water temperature as low as possible without compromising tenant comfort or equipment operation. Whenever the curve is changed be sure to give a revised copy of the ***Heating Water Temperature Curve*** to the Superintendent.

The ***Heating Water Control Graph*** is used for daily temperature recording. The Superintendent fills out the graph using the following steps:

1. The outside air temperature is recorded on the graph in the lower half of the form.
2. The ***Heating Water Temperature Curve*** form is referred to, in order to determine what the design supply water temperature is. This expected value is recorded on the graph in the upper half of the form.
3. Finally, the actual supply water temperature is checked and recorded on the graph in the upper half of the form.

The difference between the expected and the actual supply water temperature is the indicator of reset control performance. A significant deviation would signal the Superintendent to initiate a ***Maintenance Request***. Early detection and correction of this type of problem can save many energy dollars and possibly reduce boiler repair costs.

Figure 5.4: Heating Water Control Graph



5.3.1 Analysis of Heating Water Control Graph

If the actual supply water temperature is consistently higher than the design temperature, then the reset controller should be adjusted. The controller should be adjusted to either lower the temperature until it is close to the design temperature or still lower until the supply water is approximately 10°C (18°F) warmer than return water. This ensures that occupant comfort is maintained. There are a number of guidelines to ensure efficient operation:

- Observe the number of windows open during the heating season. Ten per cent or more of the windows open indicate that the building is being overheated.
- Arrange for air temperature readings in one or more suites on a lower floor. Consistently high readings (greater than 25°C with the windows closed) in lower floor units indicate the building is overheated. Acceptable indoor air temperature ranges from 20°C to 23°C.
- Unusual weather conditions such as strong, cold winds may create temporary discomfort in the building. If the supply water temperature is adjusted to compensate, change the control back once the bad weather has passed. It is inefficient to set the controller to provide ample heat under all conceivable conditions.
- If the heating system performs well at low outdoor temperatures, consider lowering the supply water temperature further by decreasing the ratio setting of the controller. A well-adjusted system will have a temperature difference between supply and return of about 10°C (18°F).
- If lowering the water temperature causes heating complaints, determine if it is a localized problem or a general requirement for hotter supply water (see ***Section 8.2: Hot Water Heating in the Operations Manual for Maintenance and Custodial Staff***).

5.4 Annual Recordings

When utility bills arrive, write the details on the three utility tracking forms ***(Electrical, Fuel,*** and ***Water)***. These forms are used to establish the utility budgets for the year and can be used to record important annual utility information for any building. A quick check of month-to-month and year-to-year daily consumption figures will point to trends, either good or bad. Some fluctuation is normal, but a year-to-year increase of over 10 per cent in daily consumption warrants further investigation and explanation. The first step would be to call the utility company to find out if any of the meter readings involved (either current or comparison months) were estimated. If this is the case, the on-site staff should take the monthly meter readings. A single estimated reading will throw off the data for two months by making one too low and the other too high.

Further investigation depends on the nature of the equipment involved; however, a discussion with site staff is the obvious starting point. Detailed equipment testing may be necessary after talking with the site staff, and concluding that a problem may exist.

5.5 Energy Conservation Efforts

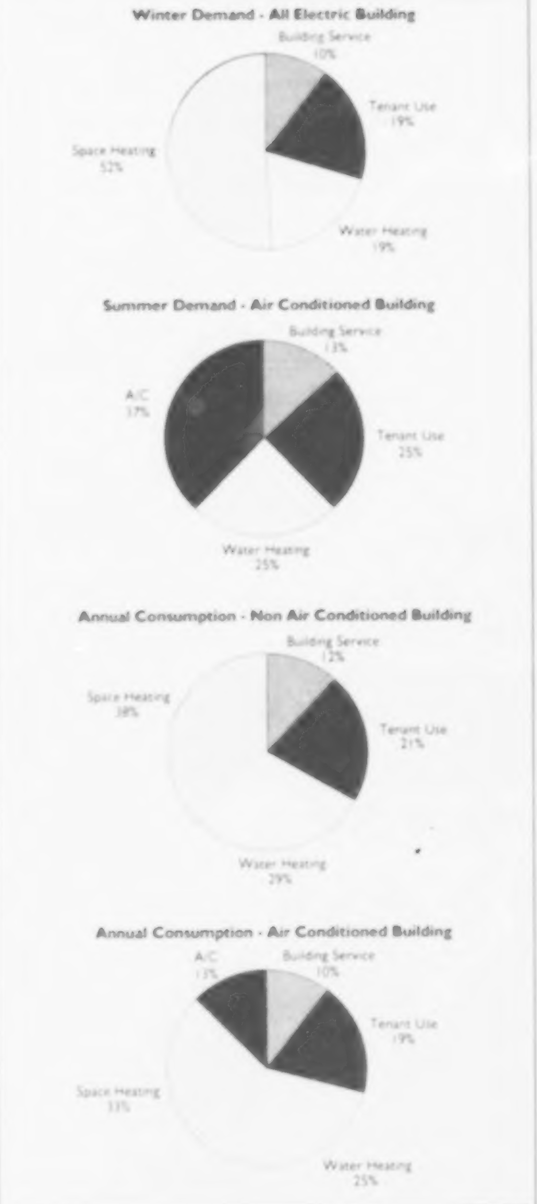
Energy conservation is mostly common sense combined with an understanding of the building systems. When considering a conservation initiative, remember the fundamental needs that must be met (minimum suite temperature, lighting, ventilation air delivery, etc.).

First, apply a simple payback analysis to the proposed project (the cost of the initiative divided by annual energy $ savings). Use contractors to help determine pricing (energy performance contractor, consulting engineer, energy auditor, etc.). The savings calculation will depend on the project being contemplated. Use the following utility bills and charts to validate the estimate when a proposal has been presented. Calculate the savings as a percentage of the annual bill or annual energy usage (in equivalent kilowatt-hours - ekWh).

The following charts show typical energy and demand breakouts for multi-residential buildings. If proposed savings seem high in relation to these charts, retain a mechanical or energy management engineer to confirm the calculations.

Typical Energy Consumptions and Electrical Demands in Multi-Residential Buildings

Figure 5.5: Energy Consumptions and Electrical Demands



Charts are adapted from Ontario Hydro data - Commercial Electrical Energy Manual - Applications, Section 2: Multi-Residential - pg 18

The *Daily Look/Listen/Touch Inspection* is one of the best methods of finding energy conservation measures. Energy waste is very often the result of equipment operating incorrectly. Proper daily inspection will quickly identify problems and allow them to be corrected.

There are many opportunities to conserve energy and water in multi-unit residential buildings. The CMHC publication ***Energy and Water Efficiency in Multi-Unit Residential Buildings*** provides methods for property managers to help determine where energy and water usage is used. Over 60 energy and water efficiency measures are described in terms of what they are, implementation considerations, cautions, costs and payback. The manual is intended to provide property managers with the necessary information to enable them to judge what measures may apply to their specific buildings.

Energy and water efficiency starts with good maintenance practices. Fine-tuned buildings tend to optimize energy and water use with little expenditure. Proper operating and maintenance practices will also help to maximize the payback of any energy or water efficiency upgrade project considered.

forms for chapter 5.0-
utilities

Electrical Tracking Form

Building Number: __________
Building Name: __________
Building Address: __________
Gross Interior Area = ________ ft^2

Notes: The **Total**, **Average**, **Max**, **Min** and **Per ft^2** values should only be filled out in the empty spaces. Also, the **Per ft^2** value should be calculated by dividing the total by the Gross Interior Area. The **Per ft^2** value for Billed Demand should be calculated using the Average Demand and should be expressed in W/ft^2 where 1kW=1,000W. The first month can be January, but does not have to be, as long as an entire year of data is available.
Abbreviations: In the column headings, "Cons." is short for Consumption.

Month	*Reading Date*	*Days Between Readings*	*Billed Demand - kW*	*Power Factor*	*Demand Charge - $*	*Billed Cons. - kWh*	*Cons. - Charge -$*	*Daily Cons. - kWh/day*	*Previous Year Daily Cons.*	*Comments*
	Total:		X	X				X	X	
	Average:	X			X	X	X			
	Max:	X			X	X	X			
	Min:	X			X	X	X			
	Per ft^2:	X		X				X	X	

Fuel Tracking Form

Building Number: ____________

Building Name: ____________

Building Address: ____________

Gross Interior Area = ________ ft^2

Notes: The **Total**, **Average**, **Max**, **Min** and **Per ft^2** values should only be filled out in the empty spaces. Also, the **Per ft^2** value should be calculated by dividing the total by the Gross Interior Area. The first month can be January, but does not have to be, as long as an entire year of data is available. Fuel values are as follows: 1m^3 of Nat. Gas=10.9ekWh; 1 Litre of #2 Oil=10.3ekWh.

Abbreviations: In the column headings, "Cons." is short for Consumption.

Month	*Reading Date*	*Days Between Readings*	*Billed Cons.*	*Cons. - ekWh*	*Cons. - Charge -$*	*Daily Cons. - Units/day*	*Daily Cons. - ekWh/day*	*Previous Year Daily Cons.*	*Comments*
	Total:					X	X	X	
	Average:	X	X	X	X				
	Max:	X	X	X	X				
	Min:	X	X	X	X				
	Per ft^2:	X				X	X	X	

Water Tracking Form

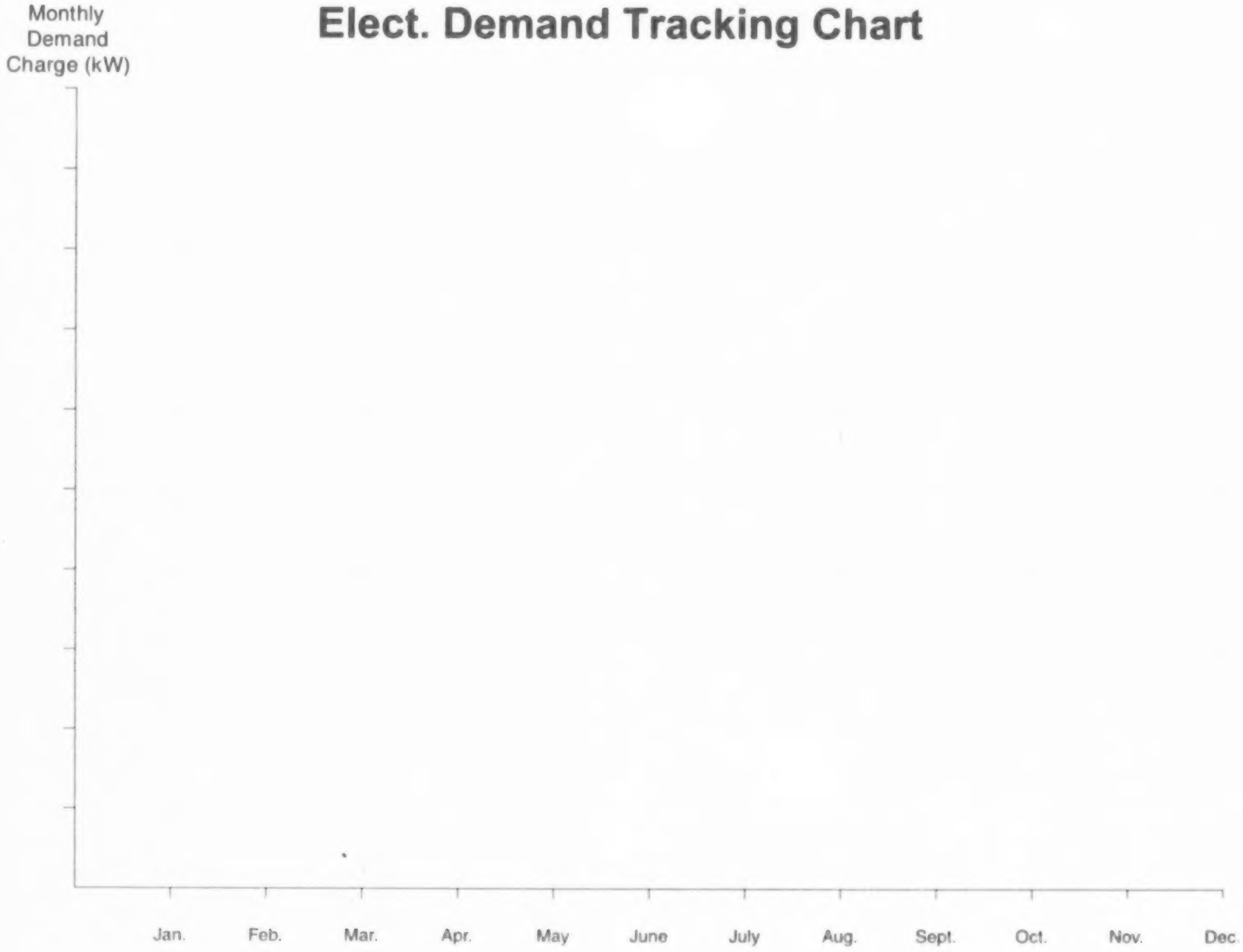
Building Number: ____________
Building Name: ____________
Building Address: ____________
Gross Interior Area = ________ ft²

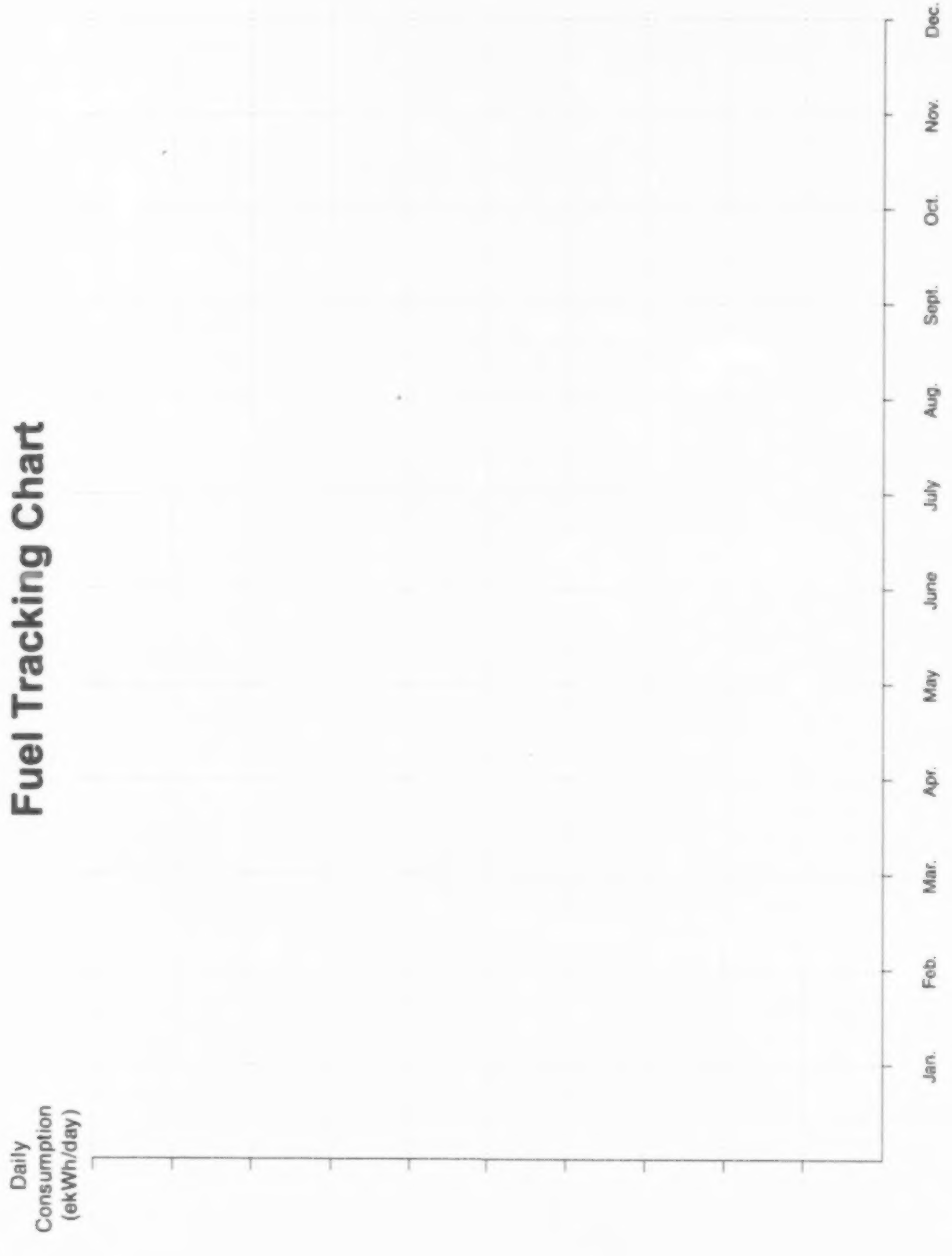
Notes: The **Total**, **Average**, **Max**, **Min** and **Per ft²** values should only be filled out in the empty spaces. Also, the **Per ft²** value should be calculated by dividing the total by the Gross Interior Area. The first month can be January, but does not have to be, as long as an entire year of data is available.
Abbreviations: In the column headings, "Cons." is short for Consumption.

Month	*Reading Date*	*Days Between Readings*	*Billed Cons. - m³*	*Cons. - Charge -$*	*Daily Cons. - m³/day*	*Previous Daily Cons. m³/day*	*Comments*
	Total:				X	X	
	Average:	X	X	X			
	Max:	X	X	X			
	Min:	X	X	X			
	Per ft²:	X			X	X	

Electrical Tracking Chart

Elect. Demand Tracking Chart





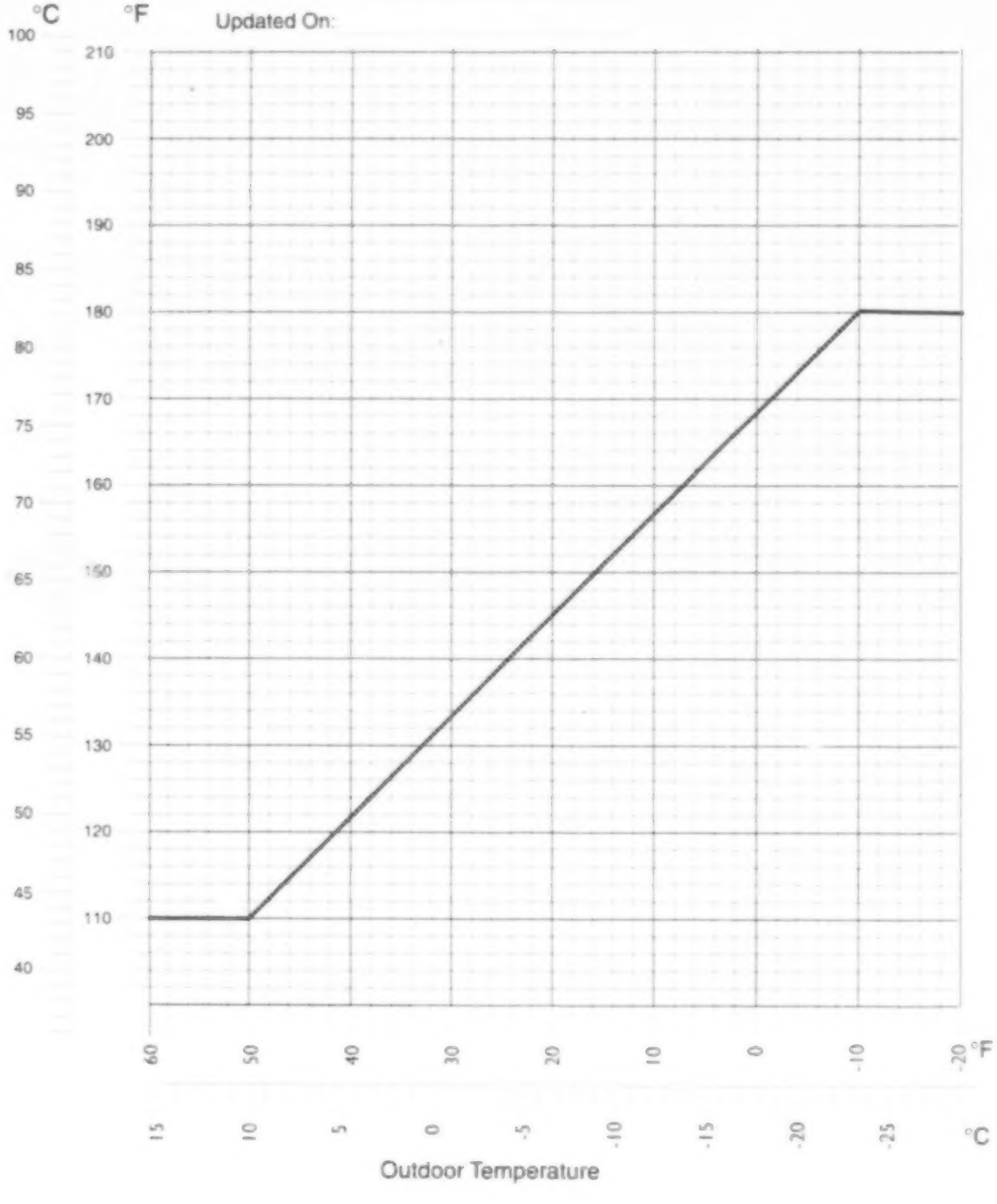
Fuel Tracking Chart

Water Tracking Chart

Heating Water Temperature Curve

Building Name:

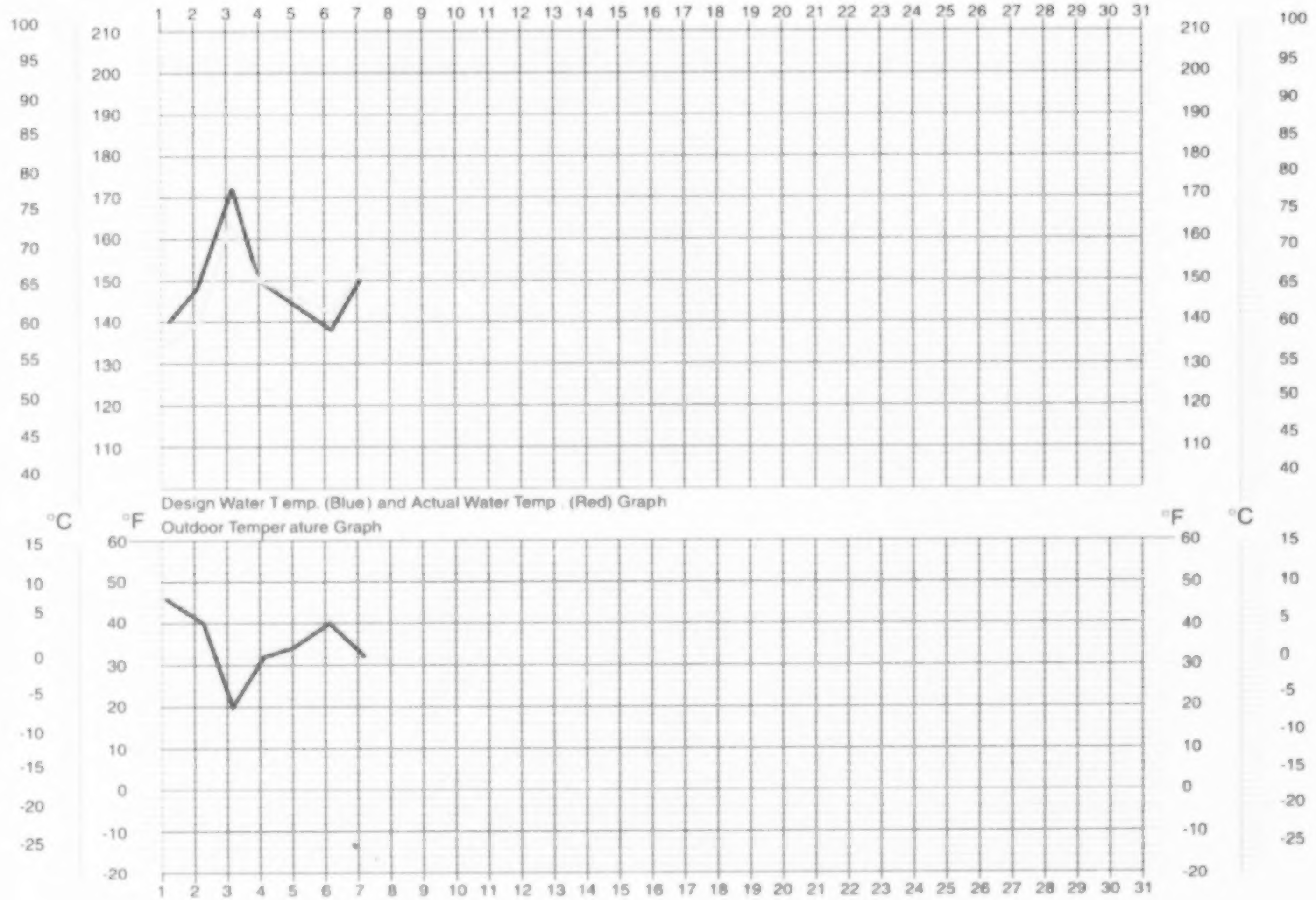
Updated On:



Building Name:

Month and Year

Heating Water Control Graph



SECTION 6.0 budgeting and control

6.0 Budgeting and Control

Budgeting involves breaking down income and expenses into meaningful categories.

This chapter guides the property manager in creating expense categories and budgeting for a reserve fund. Basic accounting principles are not covered, as courses on this topic are widely available.

It is highly recommended that the budgeting process utilize computers and commercially available accounting software packages. Personal computers are becoming standard property management tools. Modern personal finance or small business accounting software costs about $100 and provides all the set up and reporting capability needed. The software will save hours and perhaps days each month and will help prevent errors while making financial information more easily available. When choosing a program, look for these features:

- Ability to set budgets either monthly or quarterly
- Ability to set budgets either by main category or by sub-category
- Ability to forecast based on data already entered
- Simplified terminology. Accounting terminology (debits, credits, accruals) can be confusing
- Ability to delete or modify transactions to correct mistakes
- Ability to show year-over-year comparisons
- Ability to track delinquent payments

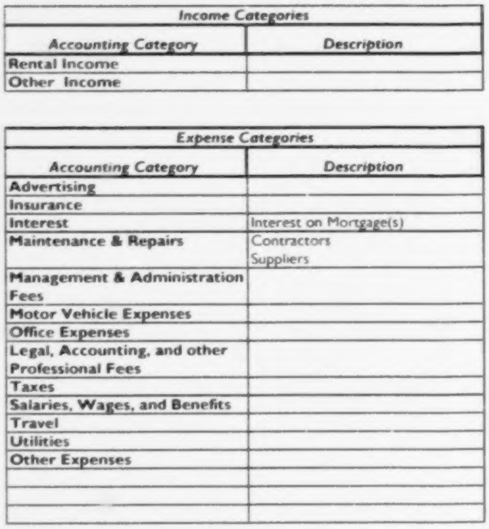
Accountants discourage the ability to delete or modify transactions, as it does not leave an audit trail. A user can modify the computerized transaction records after the fact without leaving a trace. However, the transaction editing ability makes the software far easier to use.

6.1 Accounts

The following account list is recommended as a starting point for a property management computerized bookkeeping system. The two tables show the income and expense categories directly related to the ***Revenue Canada - Statement of Real Estate Rentals*** form (T776(E)).

The main categories are shown in **bold**, with subcategories indented:

Figure 6.1: Income and Expense Categories



Income Categories	
Accounting Category	*Description*
Rental Income	
Other Income	

Expense Categories	
Accounting Category	*Description*
Advertising	
Insurance	
Interest	Interest on Mortgage(s)
Maintenance & Repairs	Contractors Suppliers
Management & Administration Fees	
Motor Vehicle Expenses	
Office Expenses	
Legal, Accounting, and other Professional Fees	
Taxes	
Salaries, Wages, and Benefits	
Travel	
Utilities	
Other Expenses	

It may be desirable to expand on these categories by adding subcategories to allow more accurate comparisons and obtain more detail. For example, the **Maintenance and Repairs** category may be expanded by adding Housekeeping, Grounds keeping and Building Systems subcategories.

Also, accountants will develop a **Balance Sheet**, listing **Assets**, (property, reserve fund, bank balances, investments, prepaid items, etc.), **Liabilities**, (tenant deposits, prepaid rent, payroll deductions payable, mortgages and loans, etc.) and **Owners Equity**, to determine profitability over a period.

The table on the next page provides additional detail on subcategories.

Figure 6.2: Income and Expense Subcategories

Income Categories		*Expense Categories*	
Accounting Category	*Description*	*Accounting Category*	*Description*
Rental Income	-Gross Potential Rent -Total Rent Collected	**Advertising**	
		Insurance	
Other Related Incomes	-Expense Recovery -Utilities -Taxes -Damages -Water Recovery -Defaults -Parking -Interest	**Interest**	-Interest on Mortgage(s)
		Maintenance & Repairs	-Contracted Services -Supplies, Tools, etc
		Management & Administration Fees	
		Motor Vehicle Expenses	
		Office Expenses	-Supplies -Telephone -Equipment -Equipment Depreciation
		Legal, Accounting, and other Professional Fees	-Legal -Accounting -Consultants -Association Dues
		Taxes	-Property Taxes -GST -PST -Business Taxes -Corporate Taxes
		Salaries, Wages, and Benefits	-Maintenance Staff -Office & Management Staff
		Travel	
		Utilities	-Cable TV -Electricity -Natural Gas -Water
		Other Expenses	-Capital Upgrades -Building & Equipment Depreciation

6.2 Reserve Fund

The Reserve Fund is a bank account or investment account used to accumulate money for planned capital projects. The owner uses it to replace major building components and fixtures that wear out. This type of account is common with condominium buildings and less common for rental and cooperative or non-profit housing type apartment buildings. However, the needs are the same in either case and it is advisable to make contributions to a reserve fund available to allow for the continuous renewal of the building elements regardless of ownership type. The required amount in the fund needs to be calculated using useful life spans of the building elements to be replaced, and budget pricing, inflation rates and interest rates.

In Ontario, the *Condominium Act* addresses the requirements of a reserve fund in ***Section 36 of Chapter C.26.*** Other provinces have similar acts that address reserve funds. The property managers should be familiar with their provincial condominium regulations.

Examples of items to be covered by the reserve fund are as follows: roofs, exterior walls, windows, doors of buildings, interior finishes, roads, sidewalks, sewers, heating, electrical and plumbing systems, elevators, laundry, recreational and parking facilities. Regular wear and tear items are not usually included in the reserve fund as they are provided for in the operating and maintenance budget (for example, window washing, landscape maintenance, pressure washing).

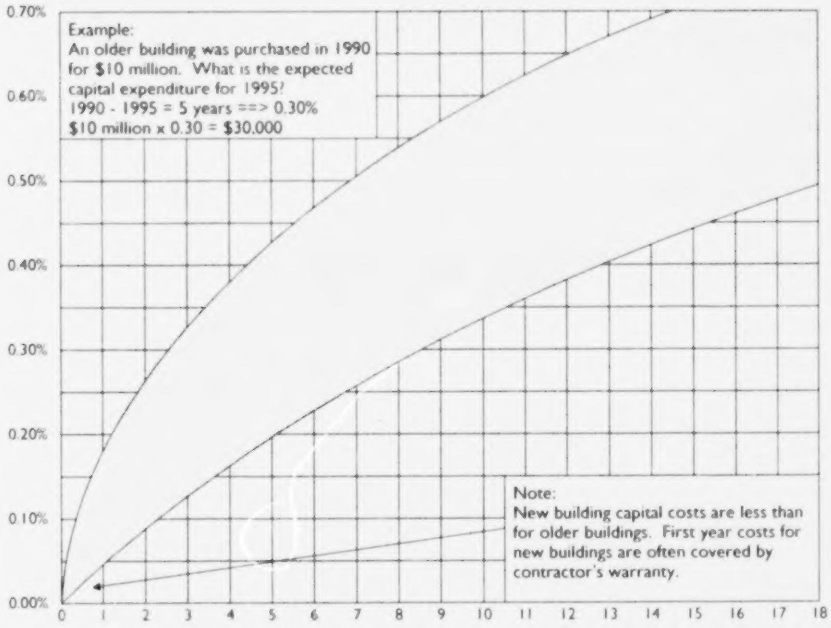
The Act also dictates that the minimum amount contributed to the fund must be 10 per cent of the total contributions to the common expenses of the building.

Budgeting Capital Expenditures

For proper reserve fund planning, the manager should assemble installed budget pricing for the applicable building components that will have to be replaced over the life of the building. There are many sources of such information that are available to help with this task[3] .

In addition to the costs associated with replacing building elements, the property manager will also have to know how much service life is left in each of the elements. ***Figure 6.4 – Life Spans of Major Components*** provides an estimate of typical service life of common building elements. It is recommended that each of the elements be inspected by a qualified contractor or consultant (every five years) to determine

Figure 6.3: Budgeting Expenditure Chart



Example:
An older building was purchased in 1990 for $10 million. What is the expected capital expenditure for 1995?
1990 - 1995 = 5 years ==> 0.30%
$10 million x 0.30 = $30,000

Note:
New building capital costs are less than for older buildings. First year costs for new buildings are often covered by contractor's warranty.

Hanscombe's Yardsticks for Costing from Southam Business Communications in Don Mills, Ontario (416) 487-3811 is a good source for across-Canada budget pricing information.

the actual condition of the element and the remaining service life as it may vary widely with operation and maintenance, usage patterns, environmental conditions and original quality of the elements installed.

While the calculation of the reserve fund requirements and the resultant annual payments into the reserve fund can be manually calculated, it is a tedious job that is not easily updated or revised. Computerized software packages are available to automate the reserve fund calculation process and are highly recommended. It is very important for the property manager to understand how to use the software and to know what entries are required.

The validity of output using such programs is dependent on the information entered by the property manager.

A building operating budget that does not account for renewal of worn-out structure, building envelope, fixtures and equipment is not realistic. Do not create a position where asset depreciation exceeds the calculated cash flow, or where large unexpected capital projects must be financed by loans on a regular basis.

It is highly recommended that the property manager retain, every five years, a qualified consultant to undertake a condition survey of the building and, based on the remaining estimated service life and replacement costs, prepare a reserve fund study. The study will ensure that the reserve fund is adequately funded to provide for the renewal of building elements over time. An independent review of the building's condition and replacement cost will provide the property manager with an objective view of the funds required to maintain a building in proper working order.

The following table provides useful life spans for equipment and fixtures that will need repair, major refurbishment or replacement[1].

Figure 6.4: Life spans of Major Components

Item	Years	Item	Years
RECREATIONAL FACILITIES		**INTERIOR FINISHES**	
Swimming Pool	20 - 25	Carpets - Common Areas	5
Pool Fence	10 - 20	Carpets - Suites	10
Pool Deck	15 - 25	Terrazzo	50
Equipment & Change Rooms	15	Painter Plaster	10
MECHANICAL EQUIPMENT		Wallpaper	10 - 15
Fans	25	Ceramic Tile	30
Chiller & Cooling Tower	20	Vinyl Tile	20 - 25
Fan Coil Units	20	Suite Entrance Doors	35
Fire Hoses	30	Kitchen Cabinets	20
Sprinkler Heads	50	**HARD LANDSCAPE**	
Stand Pipe & Distribution Piping	50	* Asphalt Roads & Parking Lots	50
Alarm System	25	* Concrete Sidewalks & Curbs	50
Compactor	20	Ramps to Underground	15
Refuse Chutes	35	Lamp Standards	30
Elevator Equipment	50	Signage	30
Elevator Cab	25	Fountains	20 - 25
Pumps	20 - 25	**BUILDING ENVELOPE**	
Snow Melting Equipment	15	* Masonry	50
Unitary Air Conditioners	20	Exterior Painting	5
Heating Boilers	25	Painted Flashing	5
Boiler Breeching & Chimney	20	Balcony Slabs	50
Domestic Hot Water Storage Tank	20	Balcony Railings	15 - 20
Domestic Water Heater	15 - 20	Built-Up Roofing	20
Valves	20 - 30	Inverted Roofing	50
Pressure Reducing Valves	15	Entrance Doors	20
Cushion Tanks	35	Sliding Patio Doors	25
Compressors	20	Parking Garage Doors	15-20
Domestic Hot Water Piping		* Windows	25 - 30
Cast Iron	15 - 20	Roof Flashings	20
Copper	50	Metal Siding	25
BUILDING ELECTRICAL		Metal Gratings	30
Smoke Detectors	10	* Front Canopies	30 - 40
Fire Alarms	10	**APPLIANCES**	
Intercom	10	Clothes Drier	10
Emergency Lighting	10	Dish Washer	10
Power Distribution	30	Stove	20
Transformer	30	Refrigerator	20
		Washing Machine	10

Components marked with an asterisk * show a life span on this chart, however they should be regularly inspected and repaired as needed. With this kind of maintenance, it should never be necessary to remove and replace them unless the building owner wants to change the design.

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[1] Provided by Mel A. Shear

6.3 Typical Operating Expenditures

Canada Mortgage and Housing Corporation has performed several studies comparing operating costs of apartment buildings on a percentage basis and on a dollars-per-unit basis. ***Figure 6.5*** summarizes the typical operating expenditures.

Co-op Housing is defined as a housing project where the tenants take an active role in the day-to-day operation and maintenance of the building, keeping the operating expenditures lower than a typical apartment complex. Maintenance costs would also be lower than expected, as tenants tend to delay repairs.

Public Housing is defined as a housing project that is government funded. The operating cost per suite is higher than Co-op Housing as tenants do not participate in operation and maintenance activities. The primary goal of public housing is to supply affordable living spaces for low-income families.

Private Rental Apartments are defined as multi-residential apartment complexes that are privately owned. As expected, the operating cost per suite is higher than both public housing and co-op housing.

The information in ***Figure 6.5 – Typical Operating Expenditures*** can be used to provide the property manager with a comparison of operating costs in other buildings and as an initial budgeting tool. Common sense must be used when comparing the figures in *Figure 6.5* with values from actual buildings. Costs and percentages can vary widely from building to building depending on the goals of building, occupancy type, building age and condition.

6.4 Taxes and Appeals

Property taxes are a major expenditure. The tax rate for a particular building will depend on the jurisdiction, however the structure in Canada is as follows:

The municipality establishes an assessment value for the property. This will vary on the designated building type, and may or may not bear any relation to the value of the property. To calculate the property tax, the assessment value is multiplied by the *Mill Rate*. The *Mill Rate* is reviewed and modified from year to year by the municipality.

Figure 6.5: Typical Operating Expenditures – Percentage and per Suite

Typical Operating Expenditures on a Percentage and a Per Suite Basis

	Co-op Housing						Public Housing		Private Rental Apartments	
	Built '73 to '78		Built '79 to '85		Built '86 to '91					
Budget Categories	**%**	**Per Suite**	**%**	**Per Suite**	**%**	**Per Suite**	**%**	**Per Suite**	**%**	**Per Suite**
Taxes	30.7%	$793	28.4%	$622	27.3%	$781	22.4%	$780	25.2%	$911
Utilities	14.1%	$364	15.0%	$329	17.7%	$506	20.7%	$721	24.3%	$879
Operations	15.2%	$393	14.5%	$317	14.2%	$407	22.8%	$794	15.1%	$547
Maintenance	18.0%	$464	12.1%	$266	21.6%	$617	11.7%	$409	16.8%	$607
Administration	12.7%	$328	13.0%	$285	11.6%	$332	9.2%	$321	9.4%	$340
Reserves	9.4%	$242	17.0%	$372	7.5%	$214	13.1%	$458	9.2%	$332
Total	**100%**	**$2.584**	**100%**	**$2,191**	**100%**	**$2.857**	**100%**	**$3.483**	**100%**	**$4,237**

There is an appeals process in place. If the tax rate for a particular building is in question, contact the local Tax Inquiries office. Since the *Mill Rate* is the same for everyone and is not subject to debate, the issue of whether the building has been fairly assessed needs to be addressed. The best way of doing this is to present examples of other similar buildings with lower assessed values. The more comparable the other buildings are, the better the case. Comparison with dissimilar buildings is unlikely to convince the municipal authorities.

6.5 Insurance

A variety of insurance is available for Canadian property owners. Premiums highly dependent on circumstance and policy will be assessed on a case-by-case basis. Such factors as construction, age, fire protection, deductible and location will all enter into the equation.

Property

Property insurance is intended to cover the cost of repairing damage from disasters such as fire or high wind. The building owner is legally obligated to carry property insurance. Broader coverage, adding earthquake and flood insurance, is available at a high deductible and premium. The standard deductible is $500, though higher deductibles of $1,000 or $2,500 will significantly reduce premiums. Note that coverage on a rental building will not cover the tenant's furniture or personal belongings. It is the responsibility of the tenant to purchase Tenant Content Insurance. In a condominium building, unit owners are responsible for suite interiors while the condominium board is responsible for coverage for the common elements.

The table below provides a quick coverage comparison of two available types of property insurance[5].

Peril	"Named Perils" Insurance	"Broad Form" Insurance
Fire	Covered	Covered
Explosion (with the exception of boiler explosion)	Covered	Covered
Lightning	Covered	Covered
Smoke	Covered	Covered
Impact by Aircraft or Spacecraft	Covered	Covered
Impact by Land Vehicles	Covered	Covered
Impact by Owned Vehicles or Employees' Vehicles	Not Covered	Covered
Riot	Covered	Covered
Malicious Acts	Covered	Covered
Sprinkler Leakage	Covered	Covered
Windstorm	Covered	Covered
Hail	Covered	Covered
Water Damage from Plumbing or Water Main	Not Covered	Covered
Theft or Burglary	Not Covered	Covered
Burglary Damage	Not Covered	Covered
Collapse of Building	Not Covered	Covered
Snow or Ice Load	Not Covered	Covered
Falling Objects	Not Covered	Covered
Freezing of Plumbing	Not Covered	Not Covered, but subsequent water damage is covered.

Courtesy Harry Edgar, South Waterloo/ Edgar Insurance Brokers Ltd.

Liability

Liability insurance covers the property owner and staff for claims brought by third parties. This would typically involve personal injury claims resulting from alleged negligence of the property owner or employees. For example, if someone slipped on an icy walk or scalded him/herself with centrally supplied domestic hot water, the resulting claim would fall under liability insurance. The building owner is legally obligated to carry liability insurance, which should be at least to $1,000,000 and preferably more.

Boiler and Machinery

Boiler and machinery insurance covers the cost of repair due to "sudden and accidental breakdown" of heating and cooling equipment (for example, boiler explosion or implosion). Although this type of insurance is optional, the mortgage holder may insist on it.

Rental income insurance will reimburse income lost due to serious damage from one of the insured perils. If a disaster has rendered the building uninhabitable, this coverage will fill the gap in rental revenue until the tenants can reoccupy the apartment and make rent payments. Usually a claim will cover losses incurred during the repair period. This type of insurance is also optional, though a mortgage holder may insist on it.

Directors and Officers Liability

Condominium Corporations will often take out directors and officers liability insurance, to protect board members from action taken against them arising from their operation and management of the condominium corporation.

Insurance is a complex field, so it is in the best interest of the property owner to have a licensed broker explain the options and find the most cost-effective coverage.

6.6 Mortgage Interest and Amortization

A significant portion of the monthly mortgage payment will be interest. The exact portion will depend on the term, the interest rate, and any payment acceleration. In Canada, the calculation of mortgage interest is strictly controlled using mandated formulae and semi-annual compounding.

SECTION 7.0

emergency and fire safety plan

7.0 Emergency and Fire Safety Plan

Provincial Fire Codes mandate the establishment of a Fire Safety Plan for multi-unit residential buildings that require a fire alarm system under the Provincial Building Code. The *Ontario Fire Marshall's Act* states that "every person who contravenes any provision of the fire code and every director or officer of a corporation who knowingly concurs in such contravention is guilty of an offence and upon conviction is liable to a fine of not more than $2,000 or to imprisonment for a term not more than one year, or to both." The local Fire Marshall's office should be contacted for details on local regulations. Failure to prepare an ***Emergency and Fire Safety Plan*** is a serious offence and can result in substantial penalties.

It is important to be familiar with provincial regulations. For example, in Ontario, the following buildings are exempted:

- apartments where no more than four suites share a single exit
- apartments three floors or less in height where every suite has an exterior exit facility leading to ground level

The Fire Safety Plan should contain:

- relevant building information such as: means of egress, extinguishers and pull-station locations, alarm details, and other information as indicated in ***Appendix C - Template for Emergency and Fire Safety Plan***
- specific initiatives that management and staff will take to be prepared for emergency situations
- safe practice principals that the building staff will follow in their daily activities
- an emergency response plan of action

The plan must be acceptable to the local Fire Marshall. A template for the **Emergency and Fire Safety Plan** is given in **Appendix C**. Also, submit the emergency instructions given to tenants as shown in **Appendix E - Tenant Information Package**.

An important part of the plan is regular fire drills, which are carried out four times per year. The Property Manager and all site staff should be involved. Create a ***Fire Drill Record*** sheet similar to the one located at the end of this chapter, and use it to record the results of each drill. Keep the records in a separate binder with the ***Emergency and Fire Safety Plan***, ready for inspection by the fire authorities.

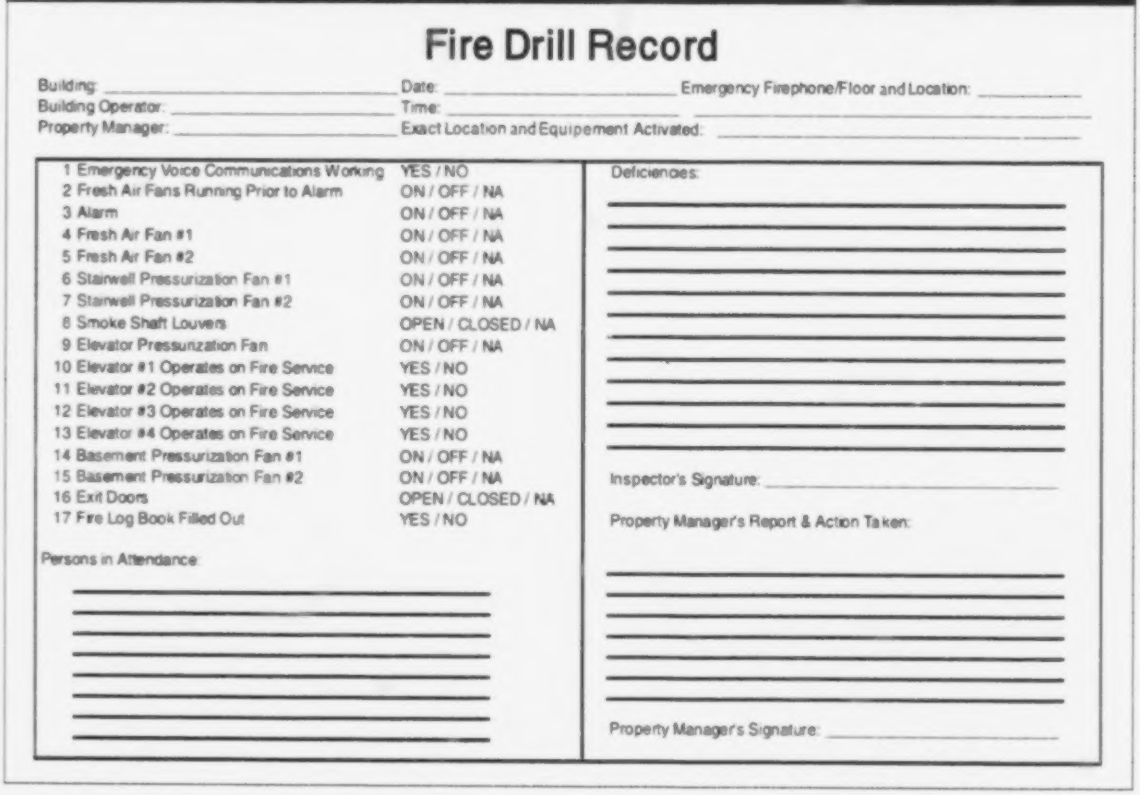
As a part of the building Emergency Fire Safety Plan, building operation staff should be made aware of where controls for air handling systems are and how to deactivate or activate the equipment in the event of fire emergencies or under instruction from firefighters.

The property manager should also be aware of whether air-handling systems (such as central exhaust system) that have been deactivated for energy conservation reasons should be reactivated in the event of fire emergencies. The municipal building inspector should be able to provide this information.

Property managers should consult with local fire departments regarding the need for evacuation of occupants during fire emergencies. Since the safest action may be to stay in the apartment, make sure that the local fire department and building department are consulted when developing the ***Emergency and Fire Safety Plan***, especially in regard to tenant action in the event of fire. While fires can gut the apartments where they are started, the fire department is often on the scene before the fire can spread to adjacent apartments and common areas. Most fatalities in apartment building fires occur due to smoke inhalation upon exit of the building. The local fire department is able to make recommendations in this regard based on specific construction, fire suppression systems and occupancy of the building.

Fire Drill Record Sheet

Figure 7.1: Fire Drill Record Sheet



Fire Drill Record

Building: ____ Date: ____ Emergency Firephone/Floor and Location: ____
Building Operator: ____ Time: ____
Property Manager: ____ Exact Location and Equipement Activated: ____

1 Emergency Voice Communications Working	YES / NO
2 Fresh Air Fans Running Prior to Alarm	ON / OFF / NA
3 Alarm	ON / OFF / NA
4 Fresh Air Fan #1	ON / OFF / NA
5 Fresh Air Fan #2	ON / OFF / NA
6 Stairwell Pressurization Fan #1	ON / OFF / NA
7 Stairwell Pressurization Fan #2	ON / OFF / NA
8 Smoke Shaft Louvers	OPEN / CLOSED / NA
9 Elevator Pressurization Fan	ON / OFF / NA
10 Elevator #1 Operates on Fire Service	YES / NO
11 Elevator #2 Operates on Fire Service	YES / NO
12 Elevator #3 Operates on Fire Service	YES / NO
13 Elevator #4 Operates on Fire Service	YES / NO
14 Basement Pressurization Fan #1	ON / OFF / NA
15 Basement Pressurization Fan #2	ON / OFF / NA
16 Exit Doors	OPEN / CLOSED / NA
17 Fire Log Book Filled Out	YES / NO

Persons in Attendance:

Deficiences:

Inspector's Signature: ____

Property Manager's Report & Action Taken:

Property Manager's Signature: ____

forms for chapter 7.0- emergency and fire safety plan

Fire Drill Record

Building: ______________________ Date: ____________________ Emergency Firephone/Floor and Location: __________

Building Operator: ______________________ Time: ____________________ ______________________________

Property Manager: ______________________ Exact Location and Equipement Activated: ______________________

1 Emergency Voice Communications Working	YES / NO
2 Fresh Air Fans Running Prior to Alarm	ON / OFF / NA
3 Alarm	ON / OFF / NA
4 Fresh Air Fan #1	ON / OFF / NA
5 Fresh Air Fan #2	ON / OFF / NA
6 Stairwell Pressurization Fan #1	ON / OFF / NA
7 Stairwell Pressurization Fan #2	ON / OFF / NA
8 Smoke Shaft Louvers	OPEN / CLOSED / NA
9 Elevator Pressurization Fan	ON / OFF / NA
10 Elevator #1 Operates on Fire Service	YES / NO
11 Elevator #2 Operates on Fire Service	YES / NO
12 Elevator #3 Operates on Fire Service	YES / NO
13 Elevator #4 Operates on Fire Service	YES / NO
14 Basement Pressurization Fan #1	ON / OFF / NA
15 Basement Pressurization Fan #2	ON / OFF / NA
16 Exit Doors	OPEN / CLOSED / NA
17 Fire Log Book Filled Out	YES / NO

Persons in Attendance:

Deficiencies:

Inspector's Signature: ______________________

Property Manager's Report & Action Taken:

Property Manager's Signature: ______________________

SECTION 8.0

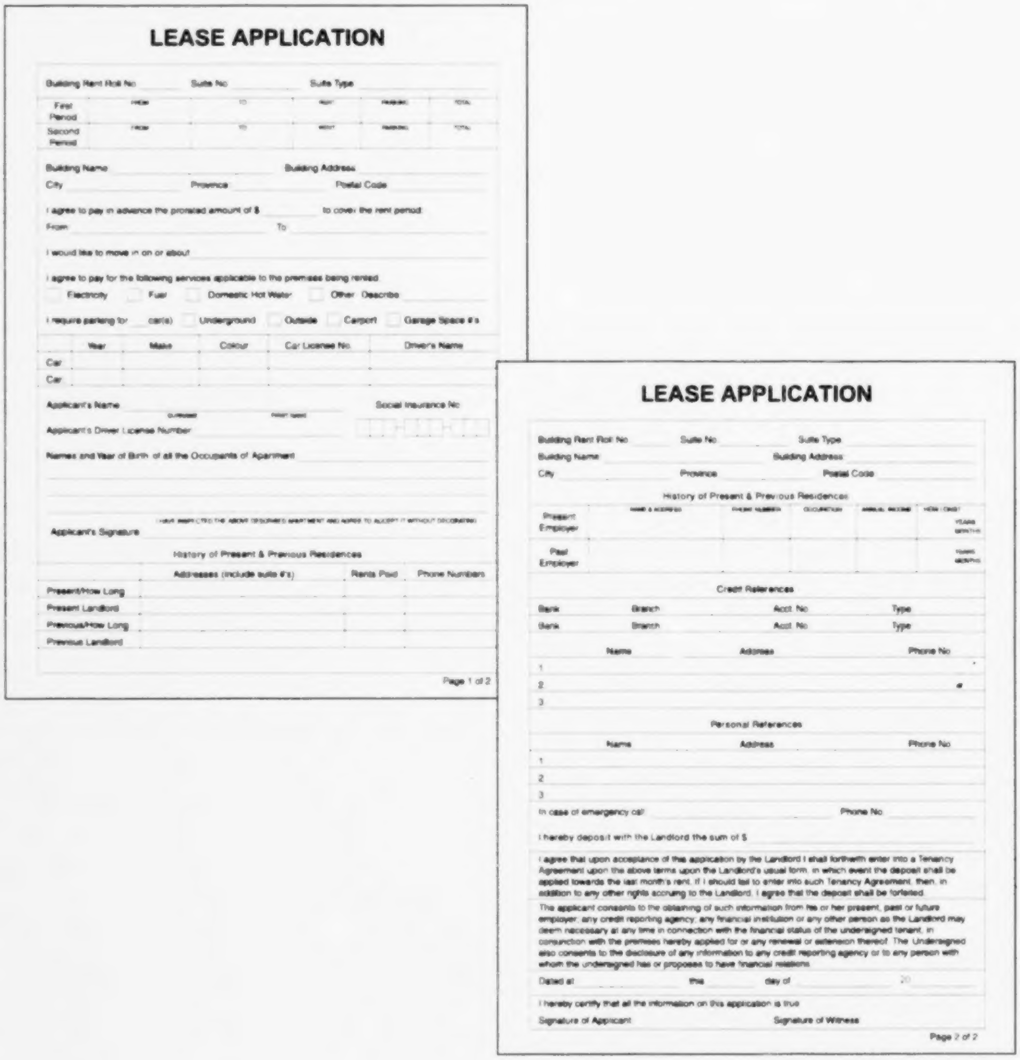
lease administration

8.0 Lease Administration

8.1 Selecting Tenants

The property manager must be able to balance the need to keep a building as fully occupied as possible and the need to ensure that prospective occupants will respect the rent agreement, the building and fellow occupants. It is recommended that property managers scrutinize each rental application to ensure that difficulties will not be experienced at some time in the future.

Figure 8.1: Lease Application



LEASE APPLICATION

Building Rent Roll No ______ Suite No ______ Suite Type ______

	FROM	TO	RENT	PARKING	TOTAL
First Period					
Second Period					

Building Name ______ Building Address ______

City ______ Province ______ Postal Code ______

I agree to pay in advance the prorated amount of $ ______ to cover the rent period

From ______ To ______

I would like to move in on or about ______

I agree to pay for the following services applicable to the premises being rented

☐ Electricity ☐ Fuel ☐ Domestic Hot Water ☐ Other Describe ______

I require parking for ___ car(s) ☐ Underground ☐ Outside ☐ Carport ☐ Garage Space #'s

	Year	Make	Colour	Car License No	Driver's Name
Car					
Car					

Applicant's Name ______ SURNAME ______ FIRST NAME Social Insurance No ☐☐☐-☐☐☐-☐☐☐

Applicant's Driver License Number ______

Names and Year of Birth of all the Occupants of Apartment ______

I HAVE INSPECTED THE ABOVE DESCRIBED APARTMENT AND AGREE TO ACCEPT IT WITHOUT DECORATING

Applicant's Signature ______

History of Present & Previous Residences

	Addresses (include suite #'s)	Rents Paid	Phone Numbers
Present/How Long			
Present Landlord			
Previous/How Long			
Previous Landlord			

Page 1 of 2

LEASE APPLICATION

Building Rent Roll No ______ Suite No ______ Suite Type ______

Building Name ______ Building Address ______

City ______ Province ______ Postal Code ______

History of Present & Previous Residences

	NAME & ADDRESS	PHONE NUMBER	OCCUPATION	ANNUAL INCOME	HOW LONG?
Present Employer					YEARS MONTHS
Past Employer					YEARS MONTHS

Credit References

Bank ______ Branch ______ Acct. No ______ Type ______

Bank ______ Branch ______ Acct. No ______ Type ______

	Name	Address	Phone No
1			
2			
3			

Personal References

	Name	Address	Phone No
1			
2			
3			

In case of emergency call ______ Phone No ______

I hereby deposit with the Landlord the sum of $ ______

I agree that upon acceptance of this application by the Landlord I shall forthwith enter into a Tenancy Agreement upon the above terms upon the Landlord's usual form, in which event the deposit shall be applied towards the last month's rent. If I should fail to enter into such Tenancy Agreement, then, in addition to any other rights accruing to the Landlord, I agree that the deposit shall be forfeited.

The applicant consents to the obtaining of such information from his or her present, past or future employer; any credit reporting agency; any financial institution or any other person as the Landlord may deem necessary at any time in connection with the financial status of the undersigned tenant, in conjunction with the premises hereby applied for or any renewal or extension thereof. The Undersigned also consents to the disclosure of any information to any credit reporting agency or to any person with whom the undersigned has or proposes to have financial relations.

Dated at ______ this ______ day of ______ 20 ______

I hereby certify that all the information on this application is true

Signature of Applicant ______ Signature of Witness ______

Page 2 of 2

One of the first steps in ensuring smooth management/tenant relations is being fully aware of the provincial landlord-tenant laws. Obtain a copy of the *Landlord/Tenant Act* from the provincial bookstore, and become familiar with it.

The ***Lease Application forms (Figure 8.1)*** are a useful start to a prospective tenant background check. Aside from listing the tenant's requirements, they also authorize the manager to proceed with a proper background check. Use the ***Verification of Residency Application*** located at the end of this chapter, to organize the background check. Follow the same procedure whether leasing directly to the applicant or whether it will be a sub-lease. In practice, even with a sub-lease, management is likely to bear the consequences of a delinquent tenant.

Where possible, insist on a clean credit history. Contact the banks given as references and also contact Equifax (Canada's largest credit bureau) at 1 800 278-0278. If there is a problem, use proper judgment as to whether it is serious enough to reject the application. Occasionally there will be an unwarranted mark on someone's record, but it will be impossible to tell if it is valid or not. Assume it is valid and leave it to the applicant to clear it with the credit bureau.

Referrals from current and prior landlords are extremely important. An effort should be made to contact them. Always look for positive endorsements. The opinions of past landlords are important. Since they no longer have any relationship with the applicants, they are likely to be very objective and honest in their assessments.

Upon acceptance, the lease application becomes the first document in the tenant file. The ***Verification of Residency Application*** is the second document, and a signed lease is the third document in the tenant file that formalizes the terms of the contract with the tenant. A standard lease agreement form is not provided here; however, a standard widely used format is available to members of The Urban Development Institute in Toronto at (416) 498-9121, or Real Estate Institute of Canada (416) 695-9000.

8.2 Suite Inspection for Damage

A new tenant has the right to expect everything in the suite to be clean, in good repair and condition. Likewise, management has the right to expect diligent care of all property by the tenant. The ***Tenant Information Package*** (see ***Appendix E***) provided to the tenant clarifies responsibilities of both the property management and the tenant with respect to the care and maintenance of the apartment and responsibilities for damage.

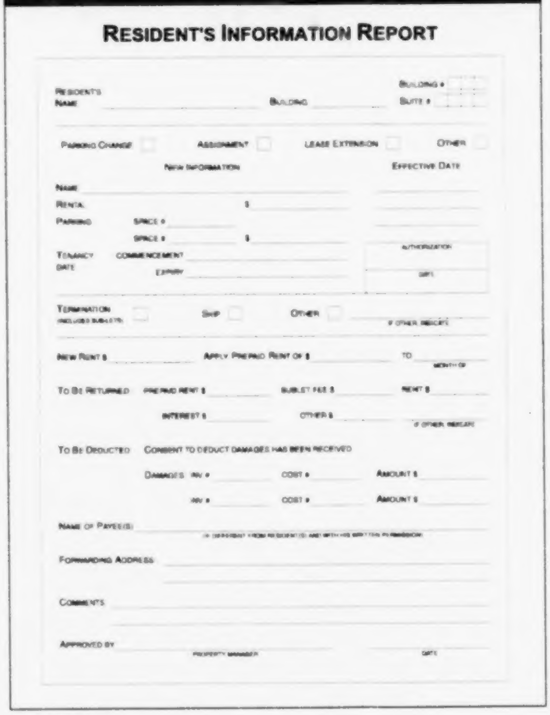
To protect both the landlord and the tenant, it is recommended that an ***Apartment Interior Inspection Report*** (sample provided at the end of this chapter) be completed by the property manager and the tenant as soon as the tenant moves in. The form can be used to document the condition of the apartment at the time of occupancy. When the tenant moves out, the form can be used to determine if any additional damage occurred for which the tenant is held responsible. Likewise, the form will protect the tenant from being held responsible for any problems that existed prior to the date the tenant moved in.

The Superintendent records the results and both parties sign off after completion of the inspection. Where repairs are needed, the Superintendent goes through the standard ***Maintenance Request Procedure***. The suite inspection should also include checking all of the receptacles with a three-prong receptacle tester (available at most hardware stores for under $10). Leaks from faucets, showers and toilet reservoir tanks should be checked and corrected as well.

8.3 Changing or Terminating a Lease

Occasionally there will be a need to change the terms of a lease, whether to extend it, terminate it, change assigned parking, or take care of damages.

Figure 8.2: Resident Information Report



RESIDENT'S INFORMATION REPORT

Resident's Name Building Building # Suite #

Parking Change ☐ Assignment ☐ Lease Extension ☐ Other ☐

New Information Effective Date

Name

Rental $

Parking Space #

Space # $

Tenancy Date Commencement

Expiry

Authorization

Date

Termination (includes sublets) ☐ Skip ☐ Other ☐ If other, indicate

New Rent $ Apply Prepaid Rent of $ to month of

To Be Returned Prepaid Rent $ Sublet Fee $ Rent $

Interest $ Other $ If other, indicate

To Be Deducted Consent to deduct damages has been received

Damages Inv # Cost # Amount $

Inv # Cost # Amount $

Name of Payee(s)

If different from resident(s) and with his written permission

Forwarding Address

Comments

Approved by

Property Manager Date

The ***Resident's Information Report*** located at the end of this chapter, can be used to record any financial arrangement between management and the tenant, beyond the original lease.

When signed by both parties, this document becomes an amendment to the lease. Keep the original in the tenant's file, give one copy to the Superintendent for their records, and give another copy to the tenant.

Upon the termination of a lease, the Superintendent conducts a *moving out* inspection using the ***Apartment Interior Inspection Report***. A comparison with the inspection report completed at the move in date will reveal any damage that occurred during the occupancy of the present tenant and provide justification for collecting damages.

Where there is no damage, send a ***Resident's Information Report*** detailing the reimbursement along with a cheque for reimbursement of the damage deposit (plus interest if applicable), within a month of the tenant moving out. Where there has been damage, send a copy of both the moving in and moving out inspection reports along with a cheque for reimbursement of the damage deposit less the cost of repairs. The amounts withheld are taken from the ***Repair Price List for Damages*** from the ***Tenant Information Package***, or from a contractor's invoice for the repair work.

8.4 Tracking Receivables

There are many capable systems for tracking and following up on rent collection, including computer programs designed specifically for the purpose. An organized collection system is essential since only a partial pre-payment is collected. It is imperative to follow up immediately on late payments.

Whatever collection system is used, it should allow for entry of payments as received by the management office. A manual system would use the ***Monthly Rental and Vacancy Report*** located at the end of this chapter, to track rent and parking payments from one month to the next. With a computerized system a monthly Accounts Receivable report should be retained on file.

8.4.1 Late Payments

The majority of tenants will pay on time or in advance. Unfortunately, there may be a few tenants in the building that will not. The procedure for collecting late payments depends on the most recent provincial legislation governing landlord-tenant relations.

General guidelines for avoiding and dealing with late payments are as follows:

- Create a policy on late payments or non-payments, based on the provincial legislation. This policy can ensure firm but fair treatment of the tenants.
- Have tenants submit post-dated cheques to the end of their lease.
- Consider using a preauthorized automatic withdrawal system. This automatically transfers the payment from the tenants' bank account into the management account on the date specified. The tenant may prefer to use this method as it eliminates any problems or hassles due to late payments.
- When a payment is not received forthwith, or is returned NSF, give the delinquent tenant written notice that their rent is overdue and request immediate payment. The notice should be friendly and non-threatening in nature.
- After 24 hours, should no response be received, visit the tenant.
- Present the tenant with concerns about the late rent. Allow the tenant to state their case or reasons for non-payment. Depending upon the circumstances, judgement will be required to determine whether or not some leniency may be required. If it does not sound legitimate, refer to the policy on late payments, and inform the tenant of the procedure if payment is not received.
- If the tenant refers to maintenance or repairs that are required, politely, but firmly inform them that these issues are separate, and will be addressed separately. Tell them to fill out a ***Maintenance Request Form*** that was given to them when they moved in (or supply them with a copy right away) and the problem will then be addressed. Refer to the policy on late payments, and inform the tenant of the procedure if payment is not received.

The following is an example of a 1995 policy for rent collection in Ontario:

1. Rent is due on first day of each month.

2. First late payment reminder notice is posted on the resident's door on the 2nd day of the month. The resident is also contacted to inquire about the late payment.

3. Second late payment reminder notice is posted on the resident's door on the 5th day of the month.

4. Form 4 of the *Landlord Tenant Act* is issued on the 10th day of the month.

5. Legal Proceedings may be commenced 14 days after issuing the Form 4.

The Superintendent and property manager should make every effort to keep relations cordial with tenants who do not pay their rent. Legal actions cost time and money and should be avoided if at all possible. The situation may resolve itself through constructive dialogue that attempts to solve or work around the reasons for non-payment.

8.5 Tenant Package

Communication between the tenant and the building manager (or Superintendent) is essential in ensuring a satisfied customer (the tenant). The tenant should be given moving instructions when the lease is signed. These instructions should include requirements such as booking elevators, moving truck parking, etc.

Upon moving in, the following documents should be given to the new tenant:

1. A ***Tenant Information Package***.
2. A standard ***Maintenance Request Form***.
3. A ***Repair Price List for Damages***.

Every new tenant should be given a standard tenant information package to welcome them and let them know a few things about the community and the building. Refer to ***Appendix D*** for a template of the ***Tenant Information Package*** or ***Appendix E*** for a sample of a completed ***Tenant Information Package***. The package is mainly a courtesy, but it serves four important functions:

1. It demonstrates professionalism and shows the new tenant that the management cares about the tenants and the building.
2. It relays important safety information.
3. It reduces the number of nuisance questions and requests to the Superintendent.
4. It outlines the expectations of the tenant, and lets them know what they can expect of the building staff and building services.

Take the time to put together a quality package to distribute. ***Appendix E*** gives a ***Sample Completed Tenant Information Package***.

As part of the ***Tenant Information Package***, suite care information is included. This informs the tenant of their obligations in caring for their apartments and the implications of damage in the suite. The package also includes suggestions for care of fixtures and equipment, and a list of repair costs.

Also included with the package is a ***Repair Price List for Damages***. It shows that the management is serious about cost recovery for any damage to the suites.

8.6 Marketing

The marketing of a multi-residential building should be executed in a customer-oriented manner focusing on a market segment. The operation of the building should be adjusted to fit that targeted market segment. With an existing building, the market segment will depend highly on the building type and the surrounding area. Changing market segments is a challenge requiring money and imagination. It may be advantageous to procure the services of a marketing professional.

Typical markets are as follows:

Figure 8.3: Market Segment Categories

Market Category	Ownership	Style	Typical Market Segments
Luxury Condominium	Affluent owners of individual suites	Trouble-free living with all the amenities	Retired couples, single professionals
Condominium	Middle class owners of individual suites.	Affordable, trouble-free living	Retired middle class couples, single professionals
Luxury Apartment	High quality and higher rental rates.	Building owners seeking return on investment	Retired couples, married professionals
Affordable Apartment	Building owners seeking return on investment	Affordable accommodations	Retired couples, young families, single parents
Co-op	Owned and operated by a non-profit group	Affordable accommodations	Young families, seniors, single parents, economically disadvantaged people requiring some subsidies
Public Housing	Owned and operated by a municipal, provincial or federal government	Affordable accommodations	Economically disadvantaged people requiring some subsidies or groups with similar social or environmental objectives

The following are examples of selecting a market segment, and changing the product to suit that segment.

Example 1

A three-floor walk-up has 12 two-bedroom apartments. The building has a laundry facility in the basement. A boiler serving hot water radiators in the apartment centrally supplies heat, and there is no air conditioning. The property is fenced in, with a large lawn. There are 18 outdoor parking spots.

The building is located down the street from a public school, and is within a short drive from several daycare centres. A block away is a park with a soccer field and a baseball diamond. A main highway is located five minutes away.

The building type and location are ideal for a young family or single parent family. In order to market to this segment of the population, the following strategies could be used:

- Advertise vacancies in local and regional newspapers, and in renter's news. Include description of the building and surroundings, focusing on items that would appeal to a young family. Fliers could also be placed in appropriate locations such as daycare centres, coin laundries, etc.
- Pricing per suite should be based on similar buildings in the area. It would also be beneficial to compare pricing to what mortgage payments on a starter house or townhouse would be. If rental costs and mortgage costs are too close, tenants might be more likely to buy.

- Adjust the operating budget to better suit young families and single parent families. For example, the money required for "Prestige Cleaning" may be better spent in adding to the existing laundry facility or adding a playground apparatus to the property.

Example 2

A 12-floor building with elevators has 88 two-bedroom apartments. The building has an indoor pool, several common rooms, storage facilities and a laundry facility. The suites are air-conditioned. The property is fenced in, with a guardhouse. There is an underground parking garage.

The building is located within walking distance of a grocery store, a drug store and an indoor mall. The building is also located on a main city bus route, and is 10 minutes by car away from a hospital and medical centre.

This building type and location are ideal for middle class retired people. In order to market to this segment of the population, the following strategies could be used:

- Advertise vacancies in local and regional newspapers, and in renter's news. Include a description of the building and surroundings, focusing on items that would appeal to retired people.
- Much of the advertising can be done through word of mouth. Vacancy signs should be placed in the elevators and the lobby for existing tenants to see. This method of advertising is not only inexpensive, but also effective.
- Pricing per suite should be based on the amenities of the building and surroundings. Rent that is too low will result in having to cut corners on items such as security, cleaning, etc. Existing tenants may even leave if the condition of the building is compromised too much.
- Adjust the operating budget to best suit retirees. For example, money spent on automatic garage door openers could greatly enhance the perceived value that the tenant receives for the money spent.

This manual does not intend to go into great detail regarding all of the intricacies of marketing. Further marketing information can be obtained through courses offered by an industry association.

8.6.1 Advertising

Depending on the terms of the lease there is usually 60 days notice of a vacancy. This is more than enough time to advertise in local real estate circulars and newspapers. Begin advertising 30 to 45 days prior to the vacancy date. If a suite becomes vacant, it will have to be shown empty, which is somewhat less attractive than fully furnished. In this case, it is important to bring the state of repair and cleanliness up to the standard of the building. Complete painting is often warranted if the suite has been occupied for over a year..

8.7 Condominium Boards and Tenant Associations

A condominium is run as a corporation with a Board of Directors and shareholders (suite owners). The property manager of the condominium is effectively an employee of the corporation.

The corporate structure is an excellent one for setting long-term direction and priorities, as long as it is run properly. There are legal requirements for regular board and general meetings; along with this come accepted standards for advance notice, agendas, motions, debate and resolutions. It is usually a requirement for the property manager to attend these meetings so that the Board of Directors can be briefed on the day-to-day operations of the buildings.

Occasionally, it may be up to the property manager to inform an inexperienced board about proper and legal protocol. It is a good idea to be informed on the provincial condominium act and the condominium's charter document. Prepare to handle the inevitable disagreements that come up with dozens of participants concerning building operations. The Board of Directors often rely upon the property manager as the best source of objective information concerning the operation and maintenance of a condominium building.

Sometimes a group of tenants in a rental building will organize a tenant association. Although such an association has no legal authority, the property manager should recognize the rights of the tenants to organize, coordinate and voice their concerns (and sometimes praise) regarding the operation and maintenance of their building.

The property manager can use tenant associations as a single point of contact for common complaints or concerns. It can also be used to relay information back to the tenants—an important function in large buildings comprising hundreds of apartments.

Establish regular meetings with the association (perhaps once every two months) to ensure that they are provided the opportunity to air any concerns and to communicate any concerns from the point of view of the property management. Tenant associations can also serve to enhance the feeling of community in a building. This, in turn, will increase tenants' satisfaction, enhance security, lower the risk of vandalism and other crime and will help prevent apartment turnover and high vacancy rates. The property manager can promote and support the development of proactive tenant associations by supplying meeting spaces and other small amenities.

forms for chapter 8.0- lease administration

LEASE APPLICATION

Building Rent Roll No.________ Suite No.____________ Suite Type: ________________

First Period	FROM	TO	RENT	PARKING	TOTAL
Second Period	FROM	TO	RENT	PARKING	TOTAL

Building Name:______________________ Building Address:____________

City:______________ Province:__________ Postal Code:__________

I agree to pay in advance the prorated amount of $________ to cover the rent period:

From:________________________ To:________________________

I would like to move in on or about________________________________

I agree to pay for the following services applicable to the premises being rented:

☐ Electricity ☐ Fuel ☐ Domestic Hot Water ☐ Other Describe:____________

I require parking for____car(s). ☐ Underground ☐ Outside ☐ Carport ☐ Garage Space #'s

	Year	Make	Colour	Car License No.	Driver's Name
Car:					
Car:					

Applicant's Name:____________________________________ Social Insurance No.

SURNAME FIRST NAME

Applicant's Driver License Number:____________________ ☐☐☐-☐☐☐-☐☐☐

Names and Year of Birth of all the Occupants of Apartment.________________________

____

____

____

I HAVE INSPECTED THE ABOVE DESCRIBED APARTMENT AND AGREE TO ACCEPT IT WITHOUT DECORATING

Applicant's Signature:____

History of Present & Previous Residences

	Addresses (include suite #'s)	Rents Paid	Phone Numbers
Present/How Long			
Present Landlord			
Previous/How Long			
Previous Landlord			

Page 1 of 2

LEASE APPLICATION

Building Rent Roll No.________ Suite No.____________ Suite Type:______________________

Building Name:____________________________ Building Address:______________________

City:__________________ Province:________________ Postal Code:________________

History of Present & Previous Residences

	NAME & ADDRESS	PHONE NUMBER	OCCUPATION	ANNUAL INCOME	HOW LONG?
Present Employer					YEARS MONTHS
Past Employer					YEARS MONTHS

Credit References

Bank	Branch	Acct. No.	Type:
Bank	Branch	Acct. No.	Type:

	Name	Address	Phone No.
1.			
2.			
3.			

Personal References

	Name	Address	Phone No.
1.			
2.			
3.			

In case of emergency call:________________________________ Phone No.______________

I hereby deposit with the Landlord the sum of $_______________________________________

I agree that upon acceptance of this application by the Landlord I shall forthwith enter into a Tenancy Agreement upon the above terms upon the Landlord's usual form, in which event the deposit shall be applied towards the last month's rent. If I should fail to enter into such Tenancy Agreement, then, in addition to any other rights accruing to the Landlord, I agree that the deposit shall be forfeited.

The applicant consents to the obtaining of such information from his or her present, past or future employer; any credit reporting agency; any financial institution or any other person as the Landlord may deem necessary at any time in connection with the financial status of the undersigned tenant, in conjunction with the premises hereby applied for or any renewal or extension thereof. The Undersigned also consents to the disclosure of any information to any credit reporting agency or to any person with whom the undersigned has or proposes to have financial relations.

Dated at__________________ this__________ day of________________ 20__________

I hereby certify that all the information on this application is true.

Signature of Applicant: Signature of Witness:

Page 2 of 2

Verification of Residency Application

1. Credit Bureau Records Check	Present Address: Present Employer: Previous Employer Position / Occupation: Bank: Bank Loans: Method of Payment: Other Loans or Obligations to Finance Companies, etc.: Judgments or Bad Debt Collections: Further Information:
2. Check of Bank Records	Account Behaviour Loans - $ $ Repayment History: Any Variations in Address, etc.:
3. Check of Finance Company's References	
4. Credit Reference Check	1. Comments: 2. Comments:
5. Landlord Check Present Previous	Behaviour How Long Rent Paid Payment Habits & Comments
6. Employment Check Present Previous	Position How Long Income Comments
7. Personal References	Known How Long Comments 1. 2. 3.
8. General Comments	
9. Checked By	Date:
10. Accepted By	Date:
11. Rejected By	Date:
12. Explain Fully Reason for Rejection	

Repair Price List For Damages

(Subject to Change Without Notice)

You are responsible for taking care of your suite. We recommend that you contact your insurance agent to arrange for proper insurance coverage.

We will inspect your suite before you move in and when you move out, to determine if any damage has occurred during your tenancy.

Keys		$ 2.00
Mailbox lock and key		$ 40.00
Keys not returned		$ 70.00
Refrigerators		
Door liner		$ 100.00
Crisper covers (single)		$ 10.00
Glass shelves		$ 12.00
Crisper covers (double)		$ 20.00
Freezer door		$ 60.00
Rubber moulding		$ 70.00
Meat tray (Gen. Elec.)		$ 30.00
Meat keeper (others)		$ 10.00
Stoves		
Oven window		$ 70.00
Cook top		$ 100.00
Broiler top		$ 14.00
Broiler bottom		$ 14.00
Suite Painting		
Complete	- one bedroom	$ 240.00
	- two bedrooms	$ 260.00
	- three bedrooms	$ 320.00
One room	- remove wallpaper	$ 60.00
	- paint (each coat)	$ 60.00
	- remove wallpaper and paint wall	$ 60.00
	- paint over dark colour	$ 60.00
Floors		
Sanding	- one bedroom	$ 130.00
	- two bedrooms	$ 170.00
	- three bedrooms	$ 200.00
	- one room	$ 90.00
	- two rooms	$ 110.00
Townhouses	- two bedrooms	$ 350.00
	- three bedrooms	$ 390.00
	- four bedrooms	$ 430.00
Tackless Perimeter Damage		
Living room and dining room		$ 60.00
One-bedroom apartment complete		$ 80.00
Two-bedroom apartment complete		$ 90.00
Three-bedroom apartment complete		$ 100.00
Vinyl Floor Tiles	per sq. ft., including labour	$ 3.50

Doors		
Suite Entrance	- AAA	$ 400.00
	- AA	$ 200.00
	- A	$ 60.00
Damage to veneer only (AA or AAA)		$ 80.00
Other doors		$ 60.00
Kitchen cupboard	- A (per pair)	$ 20.00
	- AA or AAA (per pair)	$ 40.00
Screen door complete		$ 100.00
Screen for door		$ 50.00
Louvre doors (not including painting)		$ 70.00
Balcony door, glass double-glazed		$ 200.00
Window and Glass		
Large window		$ 80.00
Large window sealed		$ 170.00
Small window		$ 40.00
Window screen		$ 30.00
Counter Tops and Cupboards		
Counter tops (L-Shaped)		$ 300.00
Counter tops (straight)		$ 200.00
Vanity counter top		$ 150.00
Install cutting board		$ 80.00
Repair	- burns 1" diameter	$ 50.00
	- burns 2" diameter	$ 60.00
	- burns 4" diameter	$ 80.00
	- cuts or scratches	$ 60.00
TV plates (including coaxial lead wire)		$ 60.00
Electrical Fixtures		
Average light fixture		$ 50.00
Glass portion only		$ 14.00
Dining room fixture		$ 100.00
Plumbing and Fixtures		
Toilet seat		$ 20.00
Tank and lid		$ 100.00
Mirror		$ 80.00
Towel bars with brackets		$ 30.00
Soap dish		$ 40.00
Chips - tub, sink, stove, fridge		$ 44.00
sink strainer		$ 4.00

RESIDENT'S INFORMATION REPORT

RESIDENT'S NAME ____________ BUILDING ____________ BUILDING # ☐☐☐ SUITE # ☐☐☐☐

PARKING CHANGE ☐ ASSIGNMENT ☐ LEASE EXTENSION ☐ OTHER ☐

	NEW INFORMATION		EFFECTIVE DATE
NAME	____________		____________
RENTAL		$ ____________	____________
PARKING	SPACE # ____________		____________
	SPACE # ____________	$ ____________	

TENANCY DATE COMMENCEMENT ____________

EXPIRY ____________

AUTHORIZATION ____________

DATE ____________

TERMINATION (INCLUDES SUB-LETS) ☐ SKIP ☐ OTHER ☐ ____________ IF OTHER, INDICATE

NEW RENT $ ____________ APPLY PREPAID RENT OF $ ____________ TO ____________ MONTH OF

TO BE RETURNED: PREPAID RENT $ ____________ SUBLET FEE $ ____________ RENT $ ____________

INTEREST $ ____________ OTHER $ ____________ ____________ IF OTHER, INDICATE

TO BE DEDUCTED: CONSENT TO DEDUCT DAMAGES HAS BEEN RECEIVED:

DAMAGES: INV. # ____________ COST # ____________ AMOUNT $ ____________

INV. # ____________ COST # ____________ AMOUNT $ ____________

NAME OF PAYEE(S) ____________ (IF DIFFERENT FROM RESIDENT(S) AND WITH HIS WRITTEN PERMISSION)

FORWARDING ADDRESS: ____________

____

COMMENTS: ____________

____

APPROVED BY ____________ PROPERTY MANAGER ____________ DATE

Apartment Interior Inspection Report

Date: ________

Apartment # ________

Building: ________

Building Address: ________

Tenant Name: ________

Building Rep. Name: ________

☐ Tenant is Moving In

☐ Tenant is Moving Out

Please check the box after the item is inspected and found to be in good condition. If the item is not in satisfactory condition, note the problem and the course of action in the comments box.

Vestibule:

- ☐ Entrance Door
- ☐ Door Hinges
- ☐ Door Lock
- ☐ Safety Chain
- ☐ Doorplate
- ☐ Transom

- ☐ Floor
- ☐ Walls
- ☐ Ceiling
- ☐ Light Fixtures
- ☐ Light Switches
- ☐ ________

Comments: ________

Coat Closet:

- ☐ Doors
- ☐ Floor
- ☐ Interior Walls
- ☐ ________

- ☐ Ceiling
- ☐ Shelving
- ☐ Rods and Hooks
- ☐ ________

Comments: ________

Living Room:

- ☐ Floor
- ☐ Baseboards
- ☐ Walls
- ☐ Ceiling
- ☐ Windows
- ☐ ________

- ☐ Doors
- ☐ Light Fixtures
- ☐ Electric Outlets
- ☐ Electric Switches
- ☐ ________
- ☐ ________

Comments: ________

Page 1 of 4

Tenant's Initials: ________

Building Rep. Initials: ________

Apartment Interior Inspection Report

Date:

Apartment #

Building:

Building Address:

Tenant Name:

Building Rep. Name:

☐ Tenant is Moving In

☐ Tenant is Moving Out

Please check the box after the item is inspected and found to be in good condition. If the item is not in satisfactory condition, note the problem and the course of action in the comments box.

Master Bedroom:

- ☐ Floor
- ☐ Baseboards
- ☐ Walls
- ☐ Ceiling
- ☐ Windows
- ☐ ____
- ☐ Doors (main, closet)
- ☐ Shelves, Rods, Hooks
- ☐ Light Fixtures
- ☐ Electric Outlets
- ☐ Electric Switches
- ☐ ____

Comments:

Bedroom #2:

- ☐ Floor
- ☐ Baseboards
- ☐ Walls
- ☐ Ceiling
- ☐ Windows
- ☐ ____
- ☐ Doors (main, closet)
- ☐ Shelves, Rods, Hooks
- ☐ Light Fixtures
- ☐ Electric Outlets
- ☐ Electric Switches
- ☐ ____

Comments:

Bedroom #3

- ☐ Floor
- ☐ Baseboards
- ☐ Walls
- ☐ Ceiling
- ☐ Windows
- ☐ ____
- ☐ Doors (main, closet)
- ☐ Shelves, Rods, Hooks
- ☐ Light Fixtures
- ☐ Electric Outlets
- ☐ Electric Switches
- ☐ ____

Comments:

Page 2 of 4 Tenant's Initials: Building Rep. Initials:

Apartment Interior Inspection Report

Date:
Apartment #
Building:
Building Address:

Tenant Name:
Building Rep. Name:

☐ Tenant is Moving In
☐ Tenant is Moving Out

Please check the box after the item is inspected and found to be in good condition. If the item is not in satisfactory condition, note the problem and the course of action in the comments box.

Dining Room

- ☐ Floor
- ☐ Baseboards
- ☐ Walls
- ☐ Ceiling
- ☐ ____
- ☐ Windows
- ☐ Light Fixtures
- ☐ Electric Outlets
- ☐ Electric Switches
- ☐ ____

Comments:

Kitchen:

- ☐ Floor
- ☐ Baseboards
- ☐ Walls
- ☐ Ceiling
- ☐ Shelves, Drawers
- ☐ Faucet, Sinks
- ☐ ____
- ☐ Refrigerator
- ☐ Stove
- ☐ Light Fixtures
- ☐ Electric Outlets
- ☐ Electric Switches
- ☐ ____
- ☐ ____

Comments:

Storage Closet:

- ☐ Floor
- ☐ Walls
- ☐ Ceiling
- ☐ ____
- ☐ Light Fixture
- ☐ Fuse Box
- ☐ Hot Water Heater
- ☐ ____

Comments:

Page 3 of 4

Tenant's Initials:

Building Rep. Initials:

Apartment Interior Inspection Report

Date: ____________________

Apartment # ____________________

Building: ____________________

Building Address: ____________________

____

Tenant Name: ____________________

Building Rep. Name: ____________________

____

☐ Tenant is Moving In

☐ Tenant is Moving Out

Please check the box after the item is inspected and found to be in good condition. If the item is not in satisfactory condition, note the problem and the course of action in the comments box.

Washroom:

- ☐ Floor
- ☐ Baseboards
- ☐ Walls
- ☐ Ceiling
- ☐ Closets, Shelves
- ☐ Towel Rods
- ☐ Door, Lock
- ☐ Vanity Mirror
- ☐ ____________________

- ☐ Sink, Faucet
- ☐ Toilet, Toilet Roll
- ☐ Bath, Shower Rod
- ☐ Faucets, Shower Head
- ☐ Electric Outlets
- ☐ Electric Switches
- ☐ Exhaust Fan
- ☐ ____________________
- ☐ ____________________

Comments: ____________________

Balcony / Sunroom:

- ☐ Floor
- ☐ Baseboards
- ☐ Walls
- ☐ Ceiling
- ☐ Sliding Doors
- ☐ ____________________

- ☐ Screen Door
- ☐ Door, Lock
- ☐ Overall Cleanliness
- ☐ Electric Outlets
- ☐ Electric Switches
- ☐ ____________________

Comments: ____________________

Page 4 of 4

Tenant's Initials: ____________________

Building Rep. Initials: ____________________

Tenant Request & Permission to Enter For In-Suite Maintenance

I, the undersigned, hereby acknowledge that I requested the maintenance described below to be done in my apartment.

I expect that this work will be completed as soon as possible. I authorized the management staff, or if necessary, a contractor to enter my apartment during reasonable hours in order to complete the work.

Notwithstanding my absence from the apartment at the time of entry, my signature on this request form shall be my consent to enter my apartment to do the work described below. Should more than one visit be necessary to correct the problem I also give my consent.

Tenant's Name:______________________________ Suite No.________

Building Name & Address:______________________________

Date:____________________ Tenant's Signature:____________________

Resident: Please fill out the above information and submit to the Superintendent. Do not fill out beyond this point.

Description of Problem and What Was Done to Correct it: ____________________

Date Completed:____________________ By Whom:____________________

Monthly Rental and Vacancy Report

Building: ______________________________

Building Operator: ______________________

Property Manager: ______________________

Month and Year: ______________________

Unit	*Tenant*	*Monthly Rent for Suite*	*Parking Spots*		*Monthly Rent for Parking*	*Total Monthly Rent*	*Payment Processed*	*Payment Confirmed*	*Notes*

Page ___ of __

SECTION 9.0

contractors and consultants

9.0 Contractors and Consultants

Service contractors and consultants should be employed to supplement the skills of the in-house staff. Contractors and consultants can provide expertise in a broad range of skills including:

- plumbing
- electrical work
- elevator service
- snow removal
- pest control
- design engineering
- architectural
- controls
- fire alarm monitoring
- communication wiring
- carpet and floor installation
- security systems
- major renovations
- internal auditing
- tax planning
- legal or paralegal help with evictions

Tasks that cannot be performed by the on-site staff should be contracted to specialists.

It is important to be knowledgeable about the contracting process. Whether it is called ***an offer, tender, quote, bid, estimate,*** or ***contract***, a piece of paper describing work to be done and a price for doing it is a legal document, binding for both parties once signed.

These documents should include financial terms and a very clear description of the products and services to be delivered, and the time frame involved. To this end, the contract may include design drawings, specifications, and written standards. Do not sign a contract until it describes clearly all expectations and the work scope. This is particularly true when dealing with a contractor for the first time or when the costs involved are large. In such cases, a review by a lawyer is usually money well spent.

For most small jobs, an outside contractor can be dealt with directly, using a ***Purchase Order*** form. If the job requires some analysis or is a potential danger to people in the building, exercise prudence and hire an architect or engineer to oversee the project.

9.1 Hiring a Consultant

Consulting engineers and architects are professionals with the expertise and ability to provide practical economical solutions to a problem. The role of a consultant is to ensure that a particular job is properly assessed. Once the nature of the problem or repair is understood, the consultant will be able to correctly specify corrective actions and ensure that the contractor properly carries out the work. When consultants are hired, their time and expenses should be taken into account, as their expertise is invaluable. In many cases, the consultant will help define the requirements and put together the appropriate documentation. When the property manager or the on-site staff has knowledge of how a repair or work should be done or where a trusted skilled contractor can do the job, a consultant may not be necessary. Keep in mind that in such cases it is the property manager who takes responsibility for the repairs and the costs incurred.

For major architectural renovations, (when a building permit is required) an architect is essential to create drawings and specifications and to ensure that all applicable codes are met.

The architect will ensure that other experts, such as structural or mechanical engineers, are consulted if required. It is important that the manager remain in the decision-making loop and is consulted by the architect before any decisions are made.

For major retrofits, engineers or architects should be hired to ensure that the appropriate equipment is installed properly. It may be beneficial to consult the original designer of the building, as they would be most familiar with its design and operation. Hiring a specialist has the following benefits:

- Decisions will be made regarding which type of equipment, materials and systems should be used. There is no such thing as a product that is perfect for every application. It is the engineer's responsibility to ensure that the solution is the best choice for an application, based on the life cycle cost (efficiency, repair costs, maintenance requirements, etc.) of the equipment. The engineer should consult the manager to inform them of the available options and prices, and allow the manager to make decisions based on their budget or funding.
- On larger jobs, pricing will be obtained through a written specification and a proper bid-spec. process. This allows for a proper comparison of price while ensuring the requirements of the project are met.
- A qualified professional, to ensure that it conforms to the specification, applicable codes and applicable industry standards, will inspect the installation.

If unclear as to what type of consultant is required, contact one that may be able to help. Most consultants will be happy to assist.

When talking with a consultant that seems capable of performing the required work, ask for references for three similar jobs that they have performed recently. *Contact the references to obtain their opinion of the work of the consultant.*

For simple projects such as one-to-one replacement of components (pumps, motors, etc.) a consultant is likely not equired. Contractors can be dealt with directly.

9.2 Hiring a Contractor

A contractor is hired to deliver a result, and will usually be paid a lump sum. The lump sum cost will cover time, expenses and materials required for the contractually agreed work scope.

9.2.1 Lump Sum Contracts

The contractor, after reviewing the contract documents, will provide the goods and services for a specified fixed dollar amount. This amount should not change. In major renovations, a 10 per cent increase in cost should be anticipated. However, the contractor will not be held accountable for circumstances or conditions that could not be anticipated when estimates were made and the bid submitted. The contract documents for this type of arrangement have to be very precise. Any misinterpretation or surprise will work in the contractor's favour. Contractors may provide a low price to get a job and then look for ways to increase the price once the job is awarded if the contract documents are not specific, clear and complete.

9.2.2 Cost Plus with Upset Sum

There are times a contractor cannot define the work required and provide an estimate for it. In this situation, the contractor generally keeps precise records of all money spent for labour, material, and subcontractors. Then the customer will be billed for these costs, in addition to an agreed fee for the entire project.

The contract may include an upset sum clause, stipulating that the contractor will guarantee that the costs, plus the fee, will not exceed an agreed to maximum amount.

A lump sum contract is recommended when dealing with a new contractor if the amount is substantial, as the contractor will usually find a way to spend the entire available amount, unless they have incentive to keep costs down. The cost plus contract can include an additional clause for profit, (often 25 per cent) of the difference between the original maximum estimate and the lower actual cost. If the cost goes above the original estimate, the contractor absorbs it.

9.3 Terms of Service Contracts

When working with a new service contractor, the initial term of service should be for one year. Once management and the contractor are satisfied with the workmanship and cost of service, longer periods can sometimes be negotiated at a discount. All contracts (greater than one year) should be subject to 30-days notice of termination with cause by either party. During the initial contract term, the contractor cannot cancel the contract except in the case of non-payment. During this term, management may, after written warnings, cancel only for a just cause such as non-performance or poor performance of the specifications.

Continuity of care develops when management, contractors and their staff develop a relationship that provides smooth handling of preventive and responsive maintenance. The people involved become very familiar with the building, its needs and the needs of the occupants. Choosing the right contractors initially will go a long way to reducing management's workload and achieving management's goals.

Service contracts may extend from one to 10 years. Extended lengths of contracts can result in discounts, but also result in inflexibility.

9.4 Additions to Contracts

If the consultant has omitted a requirement for the work to be done, or the owner has additional needs, or uncontrollable conditions arise that may entitle the contractor to additional payment, an addition to the contract is arranged. In these circumstances, the contractor must list the items involved and price each item. This should be done as soon as possible so that the conditions that caused the increase in price can be assessed and the contract be revised. Reconciliation of extra costs should not be left until the job is completed as this can lead to disputes regarding the need for the extra work, the value of the work and whether the extra work was actually authorized or not.

9.5 Escalation Clauses

Both parties should view all contracts as a fair exchange. Thus, it is unreasonable to expect a contractor to continue providing service over a long period with no price increases, when labour and material costs are escalating. Events that could reasonably trigger a rate escalation are:

- Increase in labour costs, union contracts, etc.
- Inflation
- Increase in tax contributions or insurance

Try to cover these factors in the original contract in order to establish an equitable formula for rate escalations. Put the onus of proof on the contractor to justify a rate escalation.

9.6 Payment Schedules

For service contracts, payments should be made periodically, depending on the amount of work and the preferences of the two parties.

For renovation and retrofit contracts, it is important to have the payments linked to project milestones, and the amount of the payments reflected by the level of work required to complete the milestone. When a payment schedule is required, the job is usually complicated enough to require a consultant. The consulting engineer or architect's scope of work should include the creation of a payment schedule.

Note the holdback. This is necessary to protect against any liens that may be placed on the building by a subcontractor that has not been paid by the contractor. The amount of holdback and when the holdback is to be paid to the contractor depends on the province. The holdback should not be paid to the contractor until a lawyer has checked for any liens.

Final payments should not be made until the following criteria are met:

- All work is completed to the owner's satisfaction and the consultant's approval.
- Workers Compensation Board Certifications have been obtained.
- Builder Lien Clearances have been obtained.

Then, and only then, should the final payments be made and documents signed to indicate a completed job.

A sample payment schedule for building an indoor pool is as follows:

Milestone	Date	% of Contract Price
1. Inspection of Foundation and Pool Walls.	June 1	20%
2. Inspection of Bldg Envelope and Connection to Existing Apartment Building	July 1	20%
3. Inspection of Plumbing, HVAC, Electric and Interior	Aug. 1	30%
4. Commissioning	Aug. 15	20%
5. Holdback	60 Days After Commissioning	10%

SECTION 10.0

filing

10.0 Filing

A typical office worker wastes 25 per cent of his or her time looking for information. This time could be saved if the information was organized and stored in a logical way. This system is suggested to keep important information easily accessible and to keep the files neat.

Buy a commercial grade filing cabinet for each building, along with a portable label maker. Label makers are handy for clearly marking cabinet drawers, binder spines and individual file folders. In addition, buy a sturdy full height bookshelf to hold books and binders that cannot be filed.

10.1 Standard Forms and Documents

Create a separate three-ring binder, containing clean copies of forms and documents used regularly. This includes the ***Lease, Tenant Information Package*** and customized forms. When all common forms are together, it is much easier to locate them for photocopying.

10.2 Emergency and Fire Safety

Create a separate three-ring binder for the fire department representative. Label the spine and put the ***Emergency and Fire Safety Plan*** in it. Insert fire protection systems test results and fire drill results in the front. For more information on portable fire extinguishers, refer to ***Section 7: Emergency and Fire Safety Plan*** of this manual.

10.3 Tenant Files

At least one filing cabinet drawer should be dedicated to tenant's files, arranged alphabetically by the tenant's last name or by unit number. The file should contain the following documents: ***Lease Application, Actual Lease, Verification of Residency Application, Apartment Interior Inspection Report*** (moving in), ***Resident's Information Report,*** and any ***Maintenance Requests*** initiated by the tenant. A tenant's file remains active as long as they live in the building. It is closed with the terminating ***Apartment Interior Inspection Report*** and the final ***Resident's Information Report*** dealing with repayment of the security deposit and reconciliation of damages. Once a tenant's file is closed, move it to an archive location (such as cardboard storage box), so that the filing cabinet contains only active tenant files.

10.4 Monthly Receivables Tracking

Create a separate hanging folder to contain ***Monthly Rental and Vacancy Reports***. Have a manila folder for each fiscal year. Keep about three years in the file cabinet and put the older records into archives.

10.5 Service Contracts

Create a file folder for service contracts, and a separate manila folder for each contract as applicable: mechanical, electrical, housekeeping, grounds keeping, elevator, fire protection, communication, sprinklers, pool maintenance, garbage removal, pest control, snow removal, etc. Each manila folder will contain the signed contract including specifications, any addenda or changes, purchase orders, billing records, payment records, work orders issued within the service contract terms, warranties, guarantees, and associated correspondence.

10.6 Central Plant Maintenance Requests

Create a separate folder for each of the following maintenance categories:

- Space heating
- Hot and cold service water
- Air conditioning
- Ventilation and air handling
- Structural
- Swimming pool
- Recreation centre
- Electrical and lighting
- Housekeeping
- Grounds keeping

These files will contain records of maintenance activities outside of service contracts and not within suites. The records include Maintenance Requests, Purchase Orders, Work Orders, and quotes for each category. Keep about three years of records in the filing cabinet and put the older records into archives.

10.7 Utility Costs

As recommended in ***Section 5: Utilities***, utility history should be stored on the computer. For a hard-copy backup create the following manila folders for each year:

- Heating Water Control - contains ***Heating Water Control Graphs*** for 12 months.
- Electrical Tracking - contains ***Electrical Tracking Forms*** (budget and actual) and ***Electrical Tracking Chart*** for the year.
- Fuel Tracking - contains ***Fuel Tracking Forms*** (budget and actual) and ***Fuel Tracking Chart*** for the year.
- Water Tracking - contains ***Water Tracking Forms*** (budget and actual) and ***Water Tracking Chart*** for the year.

Keep three years on file, and archive any older records.

10.8 Miscellaneous Files

Create files using a separate manila folder for the following items:

1. Contemplated Conservation Projects, including any investigations, calculations, quotes, and proposals. See ***Section 5.5 Energy Conservation Efforts*** for potential projects.

2. Capital (Reserve Fund) Projects, including calculations, proposals, quotes, work orders, purchase orders and work descriptions.

3. Environmental Issues, including CFC's, Asbestos Reports, etc.

4. Security Problems.

5. Insurance Issues.

6. Legal Issues.

7. Computer Information, including back-up disks, password protection, etc.

APPENDIX A

property manager's responsibilities

General

The following defines the leasing, administration and maintenance services expected of the Property Manager. It also sets objectives and standards against which performance can be measured. The Property Manager reports to the Owner(s). He or she is expected to direct the Superintendent and manage other on-site or outside contracting staff performing maintenance or refurbishment in the assigned building.

Objectives

1. To administer and monitor the financial transactions necessary for the operation of the building.
2. To provide safety, security, satisfaction and a general feeling of well being for people occupying the assigned building.
3. To always maintain the assigned building to the Owner's standard.
4. To strive to expand the human and technical skills of the Superintendent and the on-site staff.
5. To provide professional and timely service for the people working in or using the facility.
6. To ensure that preventative, corrective and breakdown maintenance, custodial care, refurbishment, and renovations are handled in a cost-effective and professional manner.
7. To maintain a formal and harmonious relationship with the tenants and visitors of the building.

Accountabilities

1. To hire all workers, trades and professionals as may be required for the proper repair, restoration, operation and maintenance of the property.
2. To lease and license the property to maximize the long-term and sustainable profit of the property.
3. To collect all rents and fees derived from the property.
4. To attend to the risk management and insurance of the property.
5. To pay municipal taxes, fees and utilities related to the property.
6. To maintain all technical and financial records, agreements, leases, contracts, etc. required for the management, supervision and control of the property.
7. To report at least quarterly on all aspects relating to the operation of the property, including summary financial statements, tenant leases, reports on non-recurring construction, renovations, repairs, etc. which affect the general management and operation of the building.
8. To maintain a bank account and ensure that all rents, fees, receipts and other forms of revenue derived from the related property are deposited to the credit of the bank account, and all expenses related to the property are drawn solely from the bank account.
9. To prepare budgets which disclose anticipated receipts and disbursements for approval by the owner. If the manager is required to incur an expense which has not been accounted for or disclosed in the budget, the manager shall obtain prior written approval for the expense.

Functional Performance Tasks

1. Collect Rents. When required, make and deliver notices for late rents, NSF cheques, charges for damages, termination, etc.
2. Make bank deposits and maintain records. Separate accounting is required for commercial, apartment, shared and prepaid rents, parking, key deposits, laundry revenue, miscellaneous charges and petty cash disbursements. Reconcile deposits and rents received.
3. Report on these activities in owner-specified formats.
4. Show apartments, take applications and have leases prepared.
5. Assess prospective tenants, including credit check.
6. Maintain a list of current and upcoming vacancies to ensure prospective tenants get good advice related to available accommodation.
7. Maintain a list of bad debts, skips, damages for reimbursement, lost revenue, etc. Follow up and report on delinquencies.
8. Ensure advertising listing includes appropriate vacancies. Advertise selected apartment vacancies in the local newspaper and when appropriate in other media. Ensure brochures are available in all target markets. Identify new advertising channels if they become available.
9. Inspect shared units, apartments and other areas. Plan and initiate actions to maintain and improve the condition of the building.
10. Supervise staff activities in the areas of cleaning, maintenance and repair, and staff scheduling.
11. Maintain staff time records and report for payroll purposes.
12. Prepare payroll statements.
13. Plan and manage response to maintenance request forms. Attempt to schedule actions for tenant satisfaction and staff availability.
14. Ensure mail, telephone, telephone answering, stationery and forms, and other activities associated with the operation are suitably handled.
15. Ensure supplies required for office and maintenance functions are available.
16. Monitor contractors working on site.
17. Review invoices and prepare cheques for signing and payment.
18. Check each suite when tenants leave. Shut off all unneeded lights, be sure all water taps are off and do not drip, close all windows, and make list of work to be done. Report on action required for unpaid rent, damages, etc.
19. Prepare schedule of units requiring work and recommend action plan.

Acceptance

The conditions and functional accountabilities detailed in the charter are mutually accepted by the undersigned.

Dated at ______________________________ this _____ day of _______________ 20____.

____

Property Manager

____

Owner

APPENDIX B

superintendent's responsibilities

General

The following defines the leasing, administration and maintenance services expected of the On-Site Building Superintendent. It also sets objectives and standards against which performance can be measured. The Superintendent reports to the Property Manager or the Owners. He/she is expected to operate and maintain the building(s), systems and equipment to the standards established by the Property Manager. They are also expected to direct and supervise any other on-site or outside contracting staff performing maintenance or refurbishment in the assigned building.

Objectives

1. To provide safety, security, satisfaction and a general feeling of well being for people occupying the assigned building.
2. To always maintain the assigned building to the Property Manager's standard.
3. To strive to expand the human and technical skills of the Superintendent and the on-site staff.
4. To provide professional and timely service for the people working in or using the facility.
5. To protect the owner's investment in the property and ensure that the structure is sound and the electrical-mechanical equipment is operating as described in the **Operating Manual for Maintenance and Custodial Staff**. To perform a Daily Look/Listen/Touch Inspection. To ensure that preventative, corrective and breakdown maintenance, custodial care, refurbishment, and renovations are handled in a cost-effective and professional manner.
6. To maintain a formal and harmonious relationship with the tenants and visitors of the building.

Accountabilities

1. To professionally carry out the services required by the tenants, the Superintendent must know how to perform the following tasks.
2. To effectively and efficiently operate the building's electrical-mechanical systems and maintain the interior and exterior of the building, the Superintendent must carry out the Maintenance and Energy Management Tasks detailed and attached to this Charter.

Functional Performance Tasks

Leasing and Administration

1. Obtain and maintain current and future rental vacancy information and keep up-to-date availability signs, including those for sublets, in accordance with information received from the Property Manager.
2. Have on hand a current price list for the leased space in the building.

3. Be aware of existing policies, the lease, and rules and regulations—such as rental policies, electrical or heat included in rental fee, adult or family building, adult floors only and assisted rental policies.
4. Be prepared to show available units, and be aware of rental features such as size of suites, amenities and location of nearby schools, churches, shopping and public transportation.
5. Complete applications to rent and accept deposits from prospective tenants.
6. Maintain key, parking and locker control.
7. [OPTIONAL] Collect rents and postdated cheques from the tenants, give receipts for cash and ensure the safe delivery of all funds to the Property Manager.
8. Stay aware of move-in and move-out of tenants, and prepare accurate incoming and outgoing inspection reports for the leased space within the Tenant Information guidelines.
9. Maintain follow-up files of all maintenance requests, and work and purchase orders until the work is completed, or goods or services are received. Follow-up on goods or services that have not been received in a timely manner. Verify and document on the order, the time spent and parts or materials used by a service contractor. Return all completed orders to the Property Manager.
10. Report to the Property Manager any unusual activities in the building.

Maintenance and Energy Management

1. Carry out daily, weekly and scheduled inspections, preventative and breakdown maintenance, custodial housekeeping, and groundskeeping care. If any of these services are handled by a contractor, ensure that everyone use the suppliers and service contractors recommended by the Property Manager. Monitor the efficiency of the electrical-mechanical equipment by recording the temperature and pressure readings on heating and cooling system logs.
2. Organize staff provided to help you with your workload. Prepare time cards and schedules of duties for all of these people.
3. Clean and maintain any vacant suites.
4. Know how to use, care for and maintain all equipment, tools, supplies, chemicals and materials kept in the building. Maintain current inventory lists and order replenishments.
5. Document all tenant maintenance requests, follow-up and correct problems where possible. If not possible, forward to the Property Manager for completion by a specialist.
6. Report deficiencies that are observed in the building.

Cleaning

1. Carry out daily, weekly and scheduled cleaning tasks as assigned by the Property Manager in the Monthly Operational Planner and the Annual Operational Checklist.
2. Ensure that contracted cleaners undertake tasks as set out in the cleaning contract and the Monthly Operational Planner. Check that tasks are performed at the required frequency and to a high standard.
3. Notify the Property Manager of any problems with the cleaning processes.

Security, Safety and Emergencies

1. Respond to all emergencies, such as fire, flood, lack of heat, power failure and other problems that could be considered emergencies.
2. Be aware of all valves and controls and their purposes so that they can be properly activated or turned off as required in the event of an emergency.
3. Maintain, close to the phone, a list of emergency numbers and the names of persons to call for additional support.
4. Always post a notice of your whereabouts or return time on the door of your apartment or office whenever it is vacant or locked.
5. During the winter season, inspect the walks on a regular basis so that any hazardous conditions can be corrected as soon as possible.
6. Understand and know how to test the fire alarm control system.
7. Ensure that all on-site staff (including yourself) know how to properly use a fire extinguisher.
8. Inspect the fire safety equipment and information in the log books as required by the local fire codes.
9. Carry out a fire drill when requested by the Property Manager.
10. Be qualified to carry out first aid when necessary.

Acceptance

The conditions and functional accountabilities detailed in the Charter are mutually accepted by the undersigned.

Dated at ____________________________ this _____ day of _______________ 20____.

____

Superintendent

____

Property Manager

Emergency and Fire Safety Plan
for
{Building Name and Address}

This Emergency and Fire Safety Plan is acceptable in accordance to the Ontario Fire Code, Section 2.8.

Dated: ____________________ by __________________________

Chief Fire Official, City of _____________________ Fire Department

Phone: ____________________ Fax: _____________________

E-Mail: ____________________

Prepared By: ___________________________

Phone: ____________________ Fax: _____________________

E-Mail: ____________________

APPENDIX C

template for emergency and fire safety plan

1.0 Introduction

To protect the occupants of this facility from fire or other life-threatening risks, the implementation of the Fire Safety and Evacuation Plan helps to assure effective utilization of the security and life safety features in the building. This Fire Safety Plan has been designed to suit the resources available at ______________________________.

This Fire Safety Plan was developed to :

- assist the people occupying this facility to become more aware of the essentials for caution, security and safety
- to ensure orderly evacuation at the time of an emergency
- to provide a maximum degree of flexibility to achieve the necessary security and fire safety for the building.

Definitions

Check:	A visual observation to ensure the device or system is in place and is not obviously damaged or obstructed
Inspect:	A physical examination to determine that the device or system will apparently perform in accordance with its intended function
Test:	Operation of the device or system to ensure that it will perform in accordance with its intended function

Important Information

The Fire Code: Ontario Regulation 454 is a provincial regulation under section 18a of the *Fire Marshal's Act*. This Code requires the owners of this facility to be responsible for carrying out the provisions of the Code. It defines the "owner" as "any person, firm or corporation controlling the property under consideration."

	Person or Group
1	
2	
3	
4	
5	
6	

Consequently, the owners include:

A copy of the Fire Code and the *Fire Marshal's Act* can be purchased from the Government of Ontario Book Store, 880 Bay Street, Toronto, Ontario, M7A IN8 and is kept in

______________________________.

1.1 Description of Building

___________________________________, located at ____________________________________, is a _______ - story plus penthouse multi-residential building with _____ rooms as detailed in the inventory of rooms chart below. There is a staff of ____ people.

Inventory of Rooms {create to suit your building}

Room Types	Basement	First Floor	Second to Fourth Floors	Penthouse	Totals
Electrical Room					
Elevator Pit					
Janitor's Closet					
Common Area Washroom					
Storage Room					
Party Room					
Change Room					
Sauna					
Swimming Pool					
Mechanical Room					
Residential Suite					
Management Office					
Games Room					
Fitness Centre					
Totals					

Submission Procedures:

The Fire Safety Plan incorporates the following items:

- Emergency procedures
- Instructions to be given to occupants (fire procedures and good housekeeping)
- Listing of supervisory staff with related duties
- Procedures for evacuation of persons in need of special assistance, if required
- Method and frequency of training supervisory staff
- Method and frequency of conducting fire drills
- Maintenance procedures for fire protection systems
- Alternate measures for occupant's fire safety during shutdown of equipment or systems
- Diagram showing type, location and operation of fire protection systems

The Fire Safety Plan should be prepared and consolidated before submission to the Chief Fire Official and should deal only with matters which pertain specifically to the particular building. Submit two copies to the fire department so that, when accepted, one copy will be returned to the building management and the other will be retained for fire department use. The following sections provide guidance in formatting the documentation.

1.2 Building Resources (Fire Safety Features)

Fire Department Access: See included *Fire Department Access Plan*
{draw plans showing how fire department personnel will gain access to the building and floors}

Fire Alarm Systems: See included *Fire Alarm System Plan*
{Describe the standby power arrangement}
{Explain the type of system and how it is activated}
{draw plans showing the locations of the control panel, annunciator panel, detectors, sounding devices and zone coverage}

Exits: See included *Evacuation Plan*
{prepare floor plans clearly, showing the exit and stairway locations for each floor}

Elevators:
In an emergency, the elevators will default to the ________ floor after returning the current passengers to the ground floor for evacuation. The elevators will then become operable only with a service key.
{describe number, locations, types of elevators}

Extinguishers and Sprinklers: See included *Fire Extinguisher and Sprinkler Plan*
There are _____ ABC extinguishers located as shown on the Fire Extinguisher Plan. There are sprinklers in ____________________, ____________________, and ____________________.
{prepare floor plans showing the locations of extinguishers, sprinklers, control valves, Siamese fittings, hose cabinets}

Emergency Lighting: See included *Emergency Lighting Plan*
{describe the type and power source for emergency lighting}
{prepare floor plans showing the locations of emergency lighting fixtures}

Pumps and Motors: See included *Pumps and Motors Plan*
{describe the function and default emergency operation of each pump and motor}
{prepare floor plans showing the locations of pumps and motors}

1.3 Human Resources and Availability

The building is owned and managed by ________________________. The phone number is __________________ from 9:00 a.m. to 5:00 p.m., Monday through Friday.

The property manager is ______________________________. He/she can be reached at one of the following numbers:

Work/Office: (_____) _____-________
Home: (_____) _____-________
Pager: (_____) _____-________
Mobile/Cellular: (_____) _____-________
Other: (_____) _____-________

The following people have been given fire safety responsibility:

1. ____________________________

2. ____________________________

2.0 Emergency Procedures

The actions to be taken by occupants in emergency situations (Emergency Procedures sign) are posted near the elevators on each floor, behind a Lucite cover. The "In Case of Fire" sign will be fixed firmly to the wall at all fire alarm pull stations and near the elevator on each floor. The Evacuation Plan (see EXITS in Section 1.2 above) showing the locations of exits and stairwells for each floor will be fixed firmly to the wall beside the "In Case of Fire" sign.

The fire alarm system will be activated to alert the residents of an emergency and to put into action the Fire Safety Plan.

IN CASE OF FIRE

Remain Calm

UPON DISCOVERY OF FIRE

- Initiate fire alarm
- Call fire department at 911
- Leave building using the nearest exit

UPON HEARING FIRE ALARM

- Leave building using the nearest exit

Caution

If you encounter smoke in the stairway, use another exit.

DO NOT USE ELEVATORS!

False Alarm

"Everyone who willfully, without reasonable cause, in any manner, makes or causes to be made a fire alarm, is guilty of an offense under the Criminal Code of Canada."

The ____________________ fire department will be notified by the Superintendent, given the address of ____ and the exact location of the fire. The Superintendent will designate someone to meet the fire fighters when they arrive to direct them to the problem area.

EMERGENCY PROCEDURES

In Case of Fire—Remain Calm

- Leave area immediately
- Close doors behind you
- Initiate fire alarm
- Call fire department at 911
- Leave building using the nearest exit.
  Do NOT use the elevators.

UPON HEARING FIRE ALARM

- Leave building using the nearest exit.
  Do NOT use the elevators.
- Close doors behind you
- If you encounter smoke in the stairwell, use another exit.

CAUTION

If there is smoke in the corridor it may be safer to stay in your suite. Close the door and attempt to seal the opening at the base of the door with wide tape, clothing or wet towels.

EVACUATION GUIDELINES

- Keep cool
- Follow the instructions of the superintendent
- Remember that you have an evacuation plan
- Follow the rehearsed plan

2.1 Procedures When Alarm Sounds

Designated persons will call the fire department. The building will be evacuated.

Evacuation

A number of important rules will be observed to facilitate a quick evacuation:

1. The exits and alternate exits will be posted in each room, and the importance of these exits will be explained to the occupants.
2. Traffic routes in corridors and out-of-doors will be similarly explained to occupants.
3. When a room is evacuated, the staff will close the door. (The staff will ensure that all of the occupants of the room are accounted for.)
4. Occupants will be moved quickly and quietly to their designated exit.
5. On leaving the building the staff will ensure that everyone moves at least 15 to 20 meters from the building to a pre-planned area. The occupants will be kept together as a group in order to facilitate a head count if necessary.

The Responsibilities of the Superintendent and Designated Assistants

1. When the fire alarm is activated, the Superintendent and assistants will move to predetermined stations to assist with the evacuation and to ensure that all persons have been evacuated.
2. Designated assistants will report to the Superintendent when their area is clear.
3. The Superintendent and designated assistants will then exit.

Return to the Building

The fire department will advise when occupants can re-enter the building.

2.2 Provisions for Fire Fighters Access

The Superintendent will:
1. Upon arrival of the fire fighters, inform the fire officer about the conditions in the building.
2. Provide access and vital information to fire fighters (such as master keys for rooms, service rooms, etc.)

2.3 Evacuating Endangered Occupants

Building occupants must be informed about the procedure to follow when they encounter dangerous conditions while attempting to exit the building. The following actions should be taken:

- Remain in the room.
- Close the door.
- Signal to fire fighters by waving.
- Crouch low to the floor if smoke enters the room.
- Move to the most protected area and partially open the window for air—close the window if smoke comes in.
- Wait to be rescued. Remain calm. Do not panic.
- Listen for instructions or information that may be give by authorized personnel over loudhailers.

2.4 Fire Extinguishment, Control or Confinement

If a small fire cannot be extinguished with a portable fire extinguisher, or if smoke presents a hazard to the extinguisher operator, then doors to the area should be closed to confine the fire. Leave the fire area, ensure that the fire alarm has been activated and that the fire department has been notified. Then wait for the fire department. The production of noxious fumes in a modern building makes any attempts at fire fighting extremely dangerous for untrained personnel.

2.5 Fire Hazards

In order to avoid fire hazards, staff and residents will be advised to:

- Keep stairways, landings, hallways, passageways and exits clear of obstructions and combustible refuse at all times.
- Keep the doors to stairways closed at all times.
- Close doors to suites during a fire.
- Ensure that electrically powered equipment, especially coffee makers and hot plates are shut off when the suite or work area is left empty.
- Refrain from using unsafe electrical appliances, frayed extension cords, overloaded electrical outlets or lamp wire for permanent wiring.
- Limit the use of flammable liquids. Practice safe handling and disposal practices.
- Avoid careless smoking. Do not smoke in bed and always use ashtrays.
- Maintain access to portable extinguishers and other fire protection equipment.

In general, staff and tenants will be advised to:

- Know where the alarm pull stations and exits are located.
- Immediately call the fire department whenever they spot smoke or fire.
- Recognize the audible fire alarm signals and the procedures established to implement safe evacuation.
- Know which building staff are assigned to the floor area being used in the building.
- Report to the building staff any condition which they perceive to be a fire hazard.
- Know the location of the floor area that may be designated as a temporary safe area of refuge.
- Know the crossover floors that lead to alternate exits.

2.6 All Bomb Threats are to be Taken Seriously

Above All, Remain Calm

Written Threat:

- Save all material along with envelopes or containers.
- Do everything possible to preserve fingerprints, paper used and postal marks.
- Contact the Superintendent immediately.

Phone Threat:

- Listen.
- Be calm and courteous.
- Do not interrupt the caller.
- Obtain as much information as possible.
- Initiate call trace action if possible and notify others by a pre-arranged signal, while the caller is still on the line.
- As soon as the caller hangs up, try to use the *69 phone company feature to retrieve the source of the call. Write down the phone number.

Information Guide When a Bomb Threat is Received

Recorded Data

Recorded By:

Date: Time: a.m./p.m. Duration of Call:

Exact Wording of Threat:

Identifying Characteristics

Sex: Estimated Age: Accent:

Voice (loud, soft,etc.):

Speech (slow, fast, etc.):

Diction (good, nasal lisp, etc.):

Manner (calm, emotional, vulgar, etc.):

Background noises:

If voice was familiar, specify:

Was the caller familiar with the area?

Trace or *69 results:

Questions to Ask

What time will the bomb explode?

Where is it?

Why did you place the bomb?

What does it look like?

Where are you calling from?

What is your name?

Other comments:

Finding a Suspicious Package:

- Do not touch or move it.
- Do not assume it is the only one.
- Contact the Superintendent immediately.
- Do not use radio communication as it may activate the bomb.

Search Guidelines:

- Search the immediate area.
- Do not touch anything—report any unusual objects.
- Help to identify any strange or misplaced objects.
- Unlock all drawers, cabinets, etc. to help the search crews.

3.0 Organization, Appointment and Instruction of Staff

3.1 Responsibilities of the Property Manager

- Establish an emergency procedure to be followed at the time of an emergency.
- Organize staff to carry out fire safety duties.
- Ensure that the Superintendent and tenants are instructed and aware of their responsibilities for emergencies and fire safety.
- Ensure the building's fire protection facilities are maintained.
- Ensure that alternate measures for the safety of the tenants are in place during any shutdown of the fire protection equipment.
- Ensure that checks, test and inspections, as required by the Fire Code, are completed on schedule and that records are retained.

3.2 General Responsibilities

- Ensure that a copy of the provincial Fire Code is in the Superintendent's office and that the staff are aware of its contents.
- Have a working knowledge of the fire alarm system and other fire control measures.
- Ensure that the fire alarm system and the fire fighting equipment installed in the building is regularly tested and maintained. Records of these actions will be kept on operational logs and equipment tags.
- In the event of shutdown of the fire protection equipment, ensure that someone has notified the fire department, and that someone is patrolling the building once per hour until the situation is corrected. Make provisions for alternate safety measures for the tenants.
- Ensure that all doors to stairways are closed at all times.
- Ensure that stairways, landings, hallways, passageways and exits, both inside and outside, are clear of obstruction at all times.
- Ensure that access roadways and fire routes are clear and accessible to the fire department.

- Ensure that combustible materials do not accumulate in any part of a stairway, fire escape or other means of egress.
- Ensure that combustible materials or waste do not accumulate in quantities in storage areas or other areas that may constitute a fire hazard.
- Ensure that all combustible waste is removed from areas where waste is placed for disposal.
- Ensure that staff and contractors working in the building are aware of the Emergency and Fire Safety Plan.
- Ensure that the Property Manager and all the senior staff have a working knowledge of the fire alarm system and how it is reset.
- Appoint and organize designated staff to carry out Fire Safety Duties.
- Ensure that all staff are trained to use the fire extinguishers.
- Ensure that all staff and tenants are aware of the exits available.

3.3 Responsibilities of Designated Assistants During an Emergency Situation

- Ensure that the fire alarm has been activated.
- Notify the fire department and inform them of the emergency conditions.
- Supervise the evacuation of the occupants.
- Upon arrival of the fire fighters, inform the Fire Official regarding conditions in the building and coordinate the efforts of the staff with those of the fire department.
- Provide access and vital information to fire fighters (such as master keys to suites).
- Ensure that the fire alarm system is not silenced until the fire department has responded and the fire department has determined that the building is safe.

3.4 Instruction of Supervisory Staff and Tenants

3.4.1 The Property Manager will provide instructions regarding:

- "In Case of Fire" procedures
- Fire Drills
- Control of Fire Hazards
- Alternative Fire Safety Measures for Occupant's Safety
- Establishment and Implementation of the Fire Safety Plan
- Building's Fire Safety Features
- Maintenance and Operations of the Building's Fire Safety Features

3.4.2 Building's Fire Safety Features

Fire Alarm System

The purpose of the fire alarm system is to alert all staff and tenants that a fire emergency exists. ***The alarm is connected to the fire station at*** ____________________________. Once the alarm is sounded, management will put into practice the emergency plan. ***This plan requires the total evacuation of the building!***

The type of alarm system installed at ________________________ is activated by {manual alarm pull stations, smoke detectors, or heat detectors}. In case of a power failure {the 110-volt smoke detectors are backed up with batteries on each floor}.

Operating instructions will include the operation of the detection devices, description of how the signals are sounded, and description of how the lamp identifying the initiating zone is illuminated. The staff will be taught how to reset the system and extinguish the alarm indicators by {depressing the reset button for two seconds}.

Fire Alarm System Inspections and Maintenance

The Superintendent will check ***the Central Alarm and Control Facility, the AC Power Lamp and the Trouble Light*** every day.

The staff will be taught that the removal of plugs and modules while line or standby power is connected may cause damage, and that polarity reversal of battery connections will damage the batteries.

Once a month, the Superintendent will test the system, check fire alarm components and check standby power batteries.

If the system indicates that there is a problem, the staff will be taught to verify that the AC power is on and that the operational switches are in normal positions. If this is the case, they will be taught to depress the "trouble silence" button momentarily to silence the trouble tone and to call for service.

Emergency Exits

The ***Evacuation Plan*** shows the locations of all exits and will be used to teach staff and tenants the location of the closest exit. Everyone will be taught to lead others to the closest exit.

Fire Department Access

The Fire Code stipulates that the fire department access routes, fire hydrants, and fire department hose connections will be kept clear of parked vehicles, excessive vegetation, snow and other obstructions at all times. These routes and exterior fire fighting aids are all suitably identified. Staff will ensure that the driveways designated as fire routes are kept clear for fire department access.

Management will be given the authority to tag or remove, at the owner's expense, all vehicles blocking fire routes.

Portable Extinguishers

________________________________has ____ (number of units) ____ (capacity) dry chemical multi-purpose ABC extinguishers strategically located in the building.

Staff must be taught that portable extinguishers are intended as a first aid measure to cope with small fires. They must follow the step-by-step user instructions which are clearly shown on the extinguisher label.

The staff will be taught that fires are classified as:

- Class A - includes paper, wood, cloth, excelsior, rubbish, etc.
- Class B - includes the burning of liquids, gasoline, oils, paints, cooking fats, etc.
- Class C - includes fires in live electrical equipment such as motors, switch gear, appliances, etc.

An ABC dry chemical multi-purpose extinguisher can be used on all three. Its stream reaches 10 to 15 feet. Its pressure source is either a pressure cartridge or internal pressurization of the cylinder. Extinguishers must be recharged after use, and kept fully charged at all times.

Extinguisher Inspections and Maintenance

The fire extinguishers will be visually inspected once per month, and defects will be repaired. Extinguisher shells, cartridges or cylinders showing leakage or permanent distortion in excess of specified limits, or which rupture, will be removed from service and replaced. The extinguishers will be maintained every six months by weighing the CO_2, or by visually checking the pressure gauge, and will be hydrostatically tested every 12 months. Retests will be conducted at the original test pressure as stated on the nameplate.

Equipment Tags will be securely attached to each extinguisher indicating dates, description of maintenance work or recharge, hydrostatic tests, the name of the servicing contractor, and the name of the person who did the testing.

Emergency Lighting and Means of Egress

Emergency lighting ensures that exits, corridors and principal exit routes are illuminated in the event of a power loss. Management will ensure that the power for this lighting is always operable.

Management will maintain exit signs to ensure they are clear and legible, and inspect them to ensure that they are illuminated and in good repair.

Management will ensure that corridors are free of obstructions. On an annual basis, management will inspect ducts, dampers, chimneys, disconnect switches, and electrical/mechanical systems to ensure they are not a fire hazard.

4.0 Fire Drills

Purpose, Frequency and Procedure

The purpose of a fire drill is to ensure that the staff and residents are totally familiar with the Emergency Evacuation Procedures, resulting in an orderly evacuation with efficient use of the exits. Fire drills will be held annually. As fire drills are conducted by the building staff, tenants will be advised that the fire department does not have to be notified.

Following each fire drill, all people that have been delegated supervisory responsibility will attend a debriefing to report on their actions and the reactions of tenants and the management staff to the drill.

Designated assistants will proceed to the stations assigned to them. At the advised time the predetermined pull station will be activated. Staff will be instructed to report any difficulty in hearing the alarm.

When the drill is completed the alarm will be reset and the "All Clear" announced.
The Superintendent and his designated assistants will then meet to present their reports and discuss deficiencies with the drill.

5.0 Control of Fire Hazards in the Building

5.1 Combustible Materials

To reduce the probability of a fire, ______________________________ will practice a high standard of housekeeping and building maintenance.

To avoid fire hazards in the building, occupants and staff will be advised to:

- Keep storage areas clean and tidy. Never store flammable liquids or materials in those areas.
- Never use candles or matches in a dark storage area.
- Discourage smoking, especially careless smoking. Use large safety ashtrays and only dispose of ashes once they are cold.
- Throw out trash as it is fuel for a fire.
- Avoid unsafe cooking practices. Never go out and leave cooking food on or in the stove. Always make sure that the stove is off when not being used. Do not overheat cooking oils.
- Familiarize yourself with the building exits, the location of fire alarm pull stations, fire extinguishers and smoke detectors.

5.2 Electrical Equipment and Wiring

As defective wiring and appliances rank as one of the major causes of fire each year, the following problems will be eliminated: ____.

5.2.1 Main Electrical Distribution Panel

- Will have a protective cover.
- Will not be over-fused.
- Will not bypass the fuses with metal jumpers, pennies, or other means.

5.2.2 Extension Cords

- Will not be spliced.
- Will not be placed under rugs.
- Will not be fastened to walls.
- Will not be used if damaged or deteriorated.
- Will not be used as permanent wiring.
- Will not be octopus wired.

5.2.3 Permanent Wiring

- All junction boxes will have protective cover plates.
- Will not be improperly spliced or joined.

5.2.4 Appliances and Electrical Equipment

- Heaters or lamps will not be placed too close to combustibles.
- Appliances or equipment lacking an inspection label will not be installed.
- Will not use a spliced appliance cord.

6.0 Maintenance Procedures for the Fire Protection System

6.1 "Look/Listen/Touch" Inspections

The maintenance procedure for the fire protection system installed at ____________________ revolves around a daily "Look/Listen/Touch" inspection. This ensures that conditions leading to breakdown or deterioration would be uncovered and corrected before it failed.

__________________________ uses a Daily Operating log to record the results of the inspection. These logs are available for inspection by the fire department.

_______________________________ uses contractors to do the tests on all the electrical/mechanical and fire protection systems. The contractor will provide management with a record of all tests and corrective measures, and these will be kept available for the fire prevention officers when they conduct their inspections.

6.2 Maintenance of Building Facilities

Portable Fire Extinguishers

The portable ABC fire extinguishers are visually checked each month to give reasonable assurance that:

1. They have not been activated—wire seals are intact.
2. Hose and horn are free of obstruction.
3. There is no physical damage or deterioration.

Fire Alarm System

- The fire alarm AC power lamp and trouble light will be checked daily.
- The central alarm and control facility will be checked daily.
- All the fire alarm components including the standby power batteries will be checked monthly.
- The fire alarm system will be tested monthly.
- The complete fire alarm system will be tested annually by an approved contractor.

Emergency Power Systems

- Staff will check that the standby batteries are tested to ensure that the power is available during an emergency.

Service Equipment, Ducting, Chimneys

- Ensure that any hoods, filters and ducts that are subject to accumulation of combustible deposits are cleaned as necessary.
- A mechanical contractor will inspect annually all fire dampers and fire stop flaps to ensure that they will close properly during an emergency.
- A mechanical contractor will annually inspect chimneys, flues and flue pipes, and clean as necessary.
- A mechanical contractor will annually inspect the disconnect switches for the ______ HVAC units.
- A mechanical contractor will annually inspect the controls for the __________ air handlers.

Fire Department Access

The Superintenent will ensure that fire paths are kept clear.

6.3 Fire Extinguishment, Control or Confinement

In the event of a small fire, the staff would try to extinguish it with a fire extinguisher, unless smoke presents a hazard to this operation. If the fire cannot be put out with an extinguisher, the staff has been instructed to:

1. Close all doors to the area to confine, and contain the fire.
2. Leave the fire area.
3. Notify the fire department.
4. Guide the fire department to the problem.

7.0 Alternate Measures for Occupants' Safety

In the event of any shutdown of fire protector equipment and systems or parts thereof, the fire department will be notified. The staff and occupants will be informed of the problem and the alternate provisions or actions that will be taken in case of an emergency. The fire department, staff and occupants of __________________ will be notified when the problem has been corrected.

8.0 Distribution of Records and Diagrams

A copy of the ____________________________ Emergency and Fire Safety Plan will be kept in {building management office} and will become part of the Operation and Energy Management Plan prepared for the use of building management and staff.

Records of all log entries will be kept in a separate binder, in {the building management office}. Floor plans and drawings described herein will become part of this emergency and fire safety plan. Equipment schematics of the fire alarm panel, fire alarm annunciator panel, the emergency power source, and the electrical room will also be attached to this plan. These floor plans and schematics will therefore become part of the Operation and Energy Management Plan.

APPENDIX D

template for tenant information package

1.0 Introduction

Welcome to your new home. This information package is designed to help you become acquainted with the building, and what it has to offer. If you have any question after reading this package, please feel free to contact the Superintendent.

Your Tenancy Agreement

This an important two-way document which explains your rights and obligations as a resident, and our rights and obligations as the owners and managers of your building. It is a good idea to know and understand all of the provisions herein.

Your Superintendent

The Superintendent is our official representative in your building, and it is the Superintendent's job to see that our responsibilities are fully carried out. If you have any question or problem not covered in this information package, you should contact the Superintendent or our Management Office. Attached to this package, you will find a copy of a Maintenance Request Form. Unless you have an emergency please write your question or problem on this form, and remember to sign the "Consent to Entry" portion of the form should we need to get into your apartment to fix the problem. It will be very helpful if you can supply as much information as possible about what you believe is the problem. Slip the document through the mail slot in the Superintendent's office door, or send it to our Management Office.

2.0 Telephone Numbers

A list of emergency and useful telephone numbers follows. It may be a good idea to preprogram the emergency numbers into your telephone or to keep this list near the telephone.

Emergency	Telephone Number
Ambulance	
Ambulance - Direct Line	
Fire Department	
Police Department: Division # ____	
Hospital ( )	
Medical Centre ( )	
Family Doctor ( )	
Distress Centre	
Poison Control	
Gatehouse	
Residential Management	
Weekend Emergency	
Superintendent	
Alternate Superintendent	
Notify in Case of Emergency ( )	

Where applicable, call Gatehouse/Superintendent when an ambulance or the police has been called in order to ensure an elevator will be ready for their use upon arrival.

Other	Telephone Number
Bell Canada (Business Office)	
Cable TV	
Postal Station	
Transit Station	
Taxi Company ( )	
Taxi Company ( )	
Closest Library ( )	

3.0 Important Information About the Building

Here is some further information designed to help you get acquainted with the community.

Major Intersection		
Neighbourhood Shopping		
Regional Shopping Centre		
Public Transportation		
Highway Access		

Local Schools:

Local Places of Worship:

Local Parks / Recreation:

4.0 Supplementary Information

Moving Hours

Laundry Facilities

Parking

House Insurance

Pets

Window Drapes

Use of Common Areas

Proper Attire

Garbage Disposal

Recycling

Use of Balconies

Disturbances

Cable TV

Bicycle Storage

Elevator Systems

5.0 Suite Care

Electrical Systems

Maintenance Requirements

Maintenance Emergencies

Operation of Heating / Cooling Equipment

Appliances

Before reporting an electrical appliance service problem, ensure that the cord is firmly plugged into the wall outlet, or that the fuse is not blown.

If it is a **stove** problem, ensure that the clock is set to the "manual" position. If it is a plug-in type of stove element, ensure that the element is firmly inserted.

If it is a **dishwasher** problem, make sure it is turned to the "ON" position, the washer door is firmly closed, and the water supply valve is turned on.

Enamel surfaces such as those found on appliances seem tough, but they should be cleaned with care. Smooth cloths and liquid detergents are best for appliance surfaces. Stove spills should be cleaned up quickly to avoid hardening. The best advice for ovens is to regularly use a good oven cleaner. Be careful of the temperature-sensing unit or you could make it give a false reading. Steel wool scouring pads are fine for stove elements, but they'll damage enamel surfaces, as will abrasive cleansers or sharp instruments.

The **refrigerator freezer** should be defrosted when frost is 5 mm thick, or whenever it interferes with storage capacity or with the door closing.

1. Turn temperature control to the "OFF" position.
2. Leave the door open.
3. After about half an hour, large pieces of ice will loosen and should be removed.

A pan of warm water in the freezer compartment will speed up the process. **Using a boiling kettle or chipping the ice with a sharp instrument can easily result in a costly repair bill!**

Balconies

Small children should always be accompanied by an adult on balconies. Many residents furnish their balconies as if they were an extra room. However, for everyone's safety and comfort, outdoor cooking cannot be allowed. When washing your balcony, we recommend consideration for those below you. Please do not put carpets down on the balcony as this will damage the concrete. Do not feed birds or allow pets to defecate on the balcony. This is a health hazard to you and your neighbours.

Taking Care of Your Floors

Use polishing-type paste waxes to protect wood floors and keep them attractive. **Floor tile liquid waxes which contain water will damage them**. For regular maintenance "cleaning" waxes are preferable. For heavy cleaning use a brand-name wood floor stripper. Wipe up spills on floor area as soon as possible. Furniture leg rests can save a lot of scuffing. Use special care when shifting furniture—refinishing floors is very expensive!

Self-polishing waxes are best for vinyl tiles, but wax build-up should be removed periodically with a good vinyl tile wax remover. To avoid wax build-up, only apply fresh wax to the traffic areas. Your Superintendent can advise you about the removal of rubber marks or stubborn stains. If you notice the wood or vinyl tiles lifting, notify your Management Office or your Superintendent.

Taking Care of Your Counter Tops

Like enamel surfaces, laminated counter tops need to be carefully maintained. Most liquids will not harm counter tops, but bleaches left on them will.

Hot pans, electric appliances, cigarettes, sharp instruments and abrasive cleansers can cause damage that would necessitate the removal and replacement of the counter. This is very expensive!
To avoid this problem always use cutting and insulating boards on your counters.

Cleaning Your Cabinets

Natural wood finishes need to be cleaned and polished with the same care given to quality wood furniture. Enamel finishes require non-abrasive household cleaners. Laminated plastic finishes can be cleaned with a soapy cloth.

Keeping Your Walls Clean

Your walls are washable, but marks from ballpoint pens, crayons and felt pens are almost impossible to wash off. It's a good idea to keep furniture away from walls to avoid marking them. Your Superintendent will be able to advise you about the best type of hangers to use for pictures or other wall hanging objects.

Window Drafts

Cold drafts often occur near windows during the winter. This can be caused by air cooling on the window which causes it to fall and form a draft in the vicinity of the window. This is to be expected and is difficult to resolve. Avoid placing chairs, bed and couches in the vicinity of windows.

In apartment buildings, condensation (water and ice) problems on the inside of the windows are caused by conditions in the suite. Normal activities such as washing, bathing, cooking—and even breathing are largely responsible for the appearance of water on the windows. Plants can also be a major source of moisture. The following are suggestions that can help overcome condensation problems.

1. Ensure that you use the exhaust fans in the kitchen and bathroom when cooking and bathing. A piece of tissue will stay firm against the grill of the exhaust if they are in good working order. If you cannot detect airflow, complete a Maintenance Request form to have the problem investigated.

2. Do not use humidifiers or vaporizers continuously.
3. Keep the apartment at the proper temperature (19°C to 22°C).
4. Keep curtains and blinds open.
5. Do not keep bedroom and bathroom doors closed–allow air to circulate in your apartment.
6. Try to limit the production of water vapour by shortening showering and bathing times, reduce the amount of stovetop boiling, and keep pots covered when cooking.
7. Do not hang wet clothes in the apartment.
8. Do not install and use portable clothes dryers.

If windows are difficult to open, a silicone spray lubricant (not petroleum-based products) will fix sticking aluminum windows. For sticky wooden windows, rub a candle in the track. If your sliding patio doors will not slide, check the track for foreign objects. If this is not the problem, it could be that the wheels that ride on the track are broken—drop a Maintenance Request at the Management Office or give it to the Superintendent.

For the safety of small children, furniture and large objects that could facilitate climbing should be removed from beneath windows and on balconies. Windows are installed with a device that will not allow them to open more than 10 cm (4 inches).

If condensation is still a problem, or the windows are not operating as indicated above, fill out a Maintenance Request form and forward it to the Management Office or Superintendent.

Plumbing Information

If you notice a leaking pipe, dripping faucet or running toilet, notify the Management Office or Superintendent immediately.

Remember, your toilet fixtures were not designed to handle disposable diapers, sanitary napkins or other items that could cause a stoppage and backup.

6.0 Fire Safety Information

Fire safety is everyone's concern. For increased safety, it is necessary to look at the major causes of apartment (condominium) fires. Studies have shown that smoking is the cause in approximately 25 per cent of all fires, while cooking equipment and appliance wiring are responsible for about 10 per cent each. Therefore, approximately 50 per cent of all apartment fires can be avoided with proper care.

Also, over 50 per cent of all fires are initially spread by igniting bedding, clothing, furniture or upholstery. It is therefore wise to check the fire retarding abilities of different materials before purchasing, especially in blankets and clothing for children.

Only non-combustible artificial Christmas trees with CSA-approved lights are permitted in the building.

Fuses should be replaced with the proper sized replacement fuses. If a certain fuse is blowing on a consistent basis, notify the Superintendent instead of installing a fuse with a higher amperage rating. (for example, never replace a 15A fuse with a 20A fuse)

The Superintendent must be informed of any handicapped persons that would require assistance in the event of a fire.

Procedures to Follow in Case of Fire:

If You Discover a Fire:

- Leave the area of the fire, closing all doors behind you.
- Activate the alarm at the nearest pull station.
- Telephone the fire department. Never assume that this has already been done.
- Use stairwells to exit the apartment building.
- If the corridor is filled with smoke it may be advisable to stay in your apartment. Put wet towels along the base of the entry door to prevent smoke from getting in. Call the fire department to let them know where you are.
- If you see smoke in the stairwell, try another exit way. Do not risk trying to get through smoke-filled corridors and stairwells if you are not immediately threatened by fire.
- Do not use the elevators until the alarm has been turned off and the fire officials have deemed it safe to do so.

If You Hear the Fire Alarm:

- Feel for heat around the door of the suite. If the door is hot, remain in the suite.
- If there is no smoke or fire in the corridor, exit by the nearest stairwell. Stay calm, and do not run down the stairwell.
- If there is smoke or fire in the stairwell, try another stairwell, or return to your suite.
- If you encounter smoke, stay low, and breath from as close to the floor as possible.
- Close all windows and doors behind you.

If You Must Stay in Your Suite:

- Close the door, but keep it unlocked.
- Phone the fire department and tell them where you are located in the building.
- Seal cracks with damp towels where smoke may enter your suite (such as under the door).
- If the room is smoky, remain low.
- Move to the balcony or any room with a window if smoke or fire gets into your suite. If you are on the balcony, close the balcony doors. If you are in a room, seal off the room using wet towels and open the window slightly for air. If smoke comes in the window, close it.
- Stay calm and wait for instructions or rescue.

7.0 Building Security

The following guidelines should be followed to maintain building security:

1. Never let people follow you into the building if they did not use a key to enter. This includes delivery people. All visitors should be "buzzed" in by the person they are visiting.
2. Never "buzz" in anyone you are unsure of.
3. Immediately report anything suspicious to a security guard or to the Superintendent (or other on-site staff).
4. Pick up your mail from your mailbox on a regular basis.
5. Notify the Superintendent and cancel all newspaper subscriptions whenever you are planning to be away for an extended period of time.
6. Immediately report doors that are left open or not working properly to a security guard or to the Superintendent (or other on-site staff).
7. Do not allow people to slip into the building as you enter. This applies to the parking garage as well. Do not be afraid to ask people their business in the building. Report any suspicious persons who do not have a good reason for being in the buildings.

APPENDIX E

sample tenant information package

1.0 Introduction

Welcome to your new home. This information package is designed to help you become acquainted with the building, and what it has to offer. If you have any question after reading this package, please feel free to contact the Superintendent.

Your Tenancy Agreement

This an important document which explains your rights and obligations as a resident, and our rights and obligations as the owners and managers of your building. It is a good idea to know and understand all of the provisions herein.

Your Superintendent

The Superintendent is our official representative in your building, and it is the Superintendent's job to see that our responsibilities are fully carried out. If you have any question or problem not covered in this information package, you should contact the Superintendent or our Management Office. Attached to this package, you will find a copy of a Maintenance Request Form. Unless you have an emergency please write your question or problem on this form, and remember to sign the "Consent to Entry" portion of the form should we need to get into your apartment to fix the problem. It will be very helpful if you can supply as much information as possible about what you believe is the problem. Slip the document through the mail slot in the Superintendent's office door, or send it to our Management Office.

2.0 Telephone Numbers

A list of emergency and useful telephone numbers follows. It may be a good idea to preprogram the emergency numbers into your telephone or to keep this list near the telephone.

Emergency	Telephone Number
Ambulance	911
Ambulance - Direct Line	459-3424
Fire Department	911
Police Department: Division # _____	
Hospital (Peel Memorial)	451-1710
Medical Centre (Finchgate Medical Center)	790-3166
Family Doctor	775-5698
Distress Centre	755-1254
Poison Control	791-6655
Gatehouse	792-9260
Residential Management	791-6161
Weekend Emergency	791-6161
Superintendent	792-7232
Alternate Superintendent	790-6022
Notify in Case of Emergency ( )	

Where applicable, call Gatehouse/Superintendent when an ambulance or the police has been called in order to ensure an elevator will be ready for their use upon arrival.

Other	Telephone Number
Bell Canada (Business Office)	599-3911
Cable TV	270-2424
Postal Station	793-2218
Transit Station	453-3466
Taxi Company (Aerofleet)	678-7077
Taxi Company (Air Cab)	741-1114
Brampton Public Library	791-4455

3.0 Important Information about the Building

Here is some further information to help you get acquainted with the community.

Major Intersection	Queen St. (Hwy 7) and Dixie	
Neighbourhood Shopping	Bramalea City Centre - Across the street	
Public Transportation	Brampton Transit Commission	453-3466
Highway Access	2 Min. from Hwy 410	

Local Schools:

Hanover Public School	215 Hanover Rd.	793-4237
Chinguacousy Secondary School	1370 Williams Parkway	791-2400
George Vanier Separate School		792-2251
Notre Dame Secondary School		840-2802
Peel Board of Education		890-1099x2107
Dufferin-Peel RC Separate School Board		890-1221

Local Places of Worship:

St. Andrews Presbyterian	1024 Queen St. E	
St. Joseph's Church	500 Church St.	
St. James Anglican	890 Church St.	
Bramalea Community Church - Baptist	2008 Queen St. E	
Calvary Pentecostal Assembly	127 Torbram Rd.	

Local Parks / Recreation:

Chinguacousy Park and Trail	Queen and Central Park - 2 Ball Diamonds, Curling Rink, 8 Tennis Courts, 1 Track, 2 Soccer Fields, Petting Zoo, Ponds, 10 miles of continuous paved trail.

4.0 Supplementary Information

Moving Hours

So others will not be inconvenienced by elevators being tied up, your Manager or Superintendent can help you pick an appropriate time for your move. Aside from reserving the elevator for your move, padding will be provided to protect the elevator cab and your furniture.

Laundry Facilities

The key to maintaining generally used areas such as the laundry room is to leave these areas the way you would like to find them. This means wiping up any spilled detergents and removing your laundry from the machine when it is finished so that the next user will not have to wait or remove it for you.

Your service key will let you into the laundry room, and you will find instructions posted describing how to properly use the equipment. Use the laundry equipment as if it were your own. Remember that breakdowns from overloading inconvenience everyone.

Parking

Please park your car in the space allotted to you. It is wise to leave nothing visible inside your car, and always lock it. If your space is in the underground parking, make sure that all the garage entrance doors are closed and locked—they are there for your protection.

When visitors arrive, be sure that they are parked in the visitor's parking area. It just takes one wrongly parked car to cause a chain reaction of problems for other residents, and a wrongly parked car in driveways could obstruct the arrival of an ambulance or fire truck during an emergency. If your guests are visiting overnight, be sure to get a temporary parking card. This card will allow your guest to park in an area designated for overnight guests during their stay.

House Insurance

As your furniture and personal belongings are not covered by our insurance policies, you should have your own insurance for those things. Check with your insurance agent to ensure that you have coverage for: burglary, water damage, smoke or water damage from firemen's equipment, damage to other premises from a fire in your unit, or accidental injury to a visitor. Be sure that you understand the claim procedure, and what you could expect to receive as a settlement. You will sleep better knowing that you are properly covered.

Pets

For everyone's convenience and comfort, pets are not allowed in this building.

Window Drapes

The drapes on your windows must be white or off-white to ensure a uniform exterior appearance to the building. No other colours are permitted.

Use of Common Areas

Swimming pools, saunas and other recreational areas are amenities provided for the enjoyment of the residents. Please follow the simple safety and sanitary rules that are posted for the protection of all users.

Proper Attire

Residents and guests are requested to wear proper attire in common areas within the complex. Please wear a suitable robe or regular street clothes, track suit, etc. No bare feet are allowed, except in the pool and sauna area.

Garbage Disposal

To avoid spills in the corridor, wrap your trash securely and dispose of it down the trash chute on your floor. Large items, cardboard boxes, bottles, aerosol cans and anything that could start a fire or block the chute should not be placed in the chute. If instructions for handling these items are not posted on the chute, ask your Manager or Superintendent for directions.

Recycling

Many items cannot be disposed of in the general garbage. Clearly labeled recycling bins are provided for cardboard, glass, cans and plastics. Please put only the proper materials in each bin—the recycling system will only work if everyone observes the guidelines.

Use of Balconies

Small children should always be accompanied by an adult on balconies. Many residents furnish their balconies as if they were an extra room. However, for everyone's safety and comfort, outdoor cooking cannot be allowed. When washing your balcony, we recommend consideration for those below you. Please do not put carpets down on the balcony as this will damage the concrete. Please do not feed birds or allow pets to defecate on the balcony. This is a health hazard to you and your neighbours.

Disturbances

Enjoy your stereo and television, and by all means entertain your friends. But please remember that regardless of where you live, it is only reasonable to be thoughtful of your neighbors—as you would like them to be considerate of you.

Cable TV

Rogers Cable TV is the local supplier of cable services. Arrangements must be made between Rogers and yourself for cable hookup in your suite. They will bill you directly.

Bicycle Storage

Bicycles must be kept chained in the rack provided in the underground parking garage. Be sure to record related information about your bicycle with your insurance company to ensure coverage.

Elevator Systems

Elevators are equipped with several safety features:

- *Brakes:* a safety clamp to stop the descent of the car if it exceeds a designated speed.
- *Governor:* regulates the speed of the elevator and cuts off the power when the speed becomes excessive.
- *Door Interlocking Device:* prevents each hoistway door from being opened from the corridor side, unless the car is at that particular landing. As well, there is an electrical device related to the controls so that the car cannot run unless every door is closed.
- *Safety Shoe:* or moveable leading edge to the car door, which activates the stopping and reversal of the car door whenever it comes in contact with a passenger or obstacle.
- *Emergency Stop Switch:* mounted on the car operating panel to actuate an emergency stop and prevent motion of the car in either direction.
- ***Final Limit Switches:*** actuate an emergency stop if the car overruns the terminal landing by a designated distance.

Should an elevator malfunction and you are trapped inside, remember that you are still safe. However there are some things that you can do to help. Check the emergency stop switch—it may have been hit accidentally. Try the "door open" button—if you are at a floor, this will open the door if the automatic system has failed. If there is a telephone, follow the instructions. Press the alarm button every minute or so until someone hears you. Relax until help arrives!

5.0 Suite Care

Electrical Systems

The wiring in your building meets Ontario Hydro safety standards and is adequate for normal appliances. Remember, however, that overloading a circuit will result in tripped circuit breakers. Before resetting a breaker make sure that the cause has been corrected. To reset, push the breaker all the way "off" and then "on."

If all power within your suite should fail, check if your neighbors still have power. If your neighbors are also without power, you can call your Superintendent, the Management Office, or the local power company for information or assistance.

Maintenance Requirements

On occasion, some maintenance work may be required within your suite. Please fill out one of the ***Maintenance Request Forms*** that accompany this document, and forward the form to the Superintendent.

Maintenance Emergencies

Maintenance Emergencies are those instances that involve fire, floods, loss of heat, complete power failure or broken suite locks. If one of these occurs, phone the appropriate number listed in ***Section*** *2.0 Telephone Numbers*.

Operation of Heating / Cooling Equipment

The building is constructed with pads that keep your suite entrance slightly separated from the door frame. This allows the fresh air supplied to the corridors to pass into your suite and out the exhaust system. Although it appears that there is a draft from the corridor, do not weather-strip the suite entrance door! If you notice any leaking heating pipes or valves, report the situation immediately to the Superintendent. To avoid serious problems, please do not try to adjust or tamper with the fan coil unit in your apartment.

For the efficient operation of the exhaust fans in your kitchen, bathroom or through the wall, clean the grill with a damp sudsy cloth on a regular basis. The stove vent fan filter could become a fire hazard if it is not cleaned regularly. It should be washed in soapy water, rinsed and drip dried.

Forced air vents and heating units cannot operate properly if they're covered by your drapes or rugs. Keep the air vents and heating units clear to allow air to circulate through them. Lamps or appliances placed too close to thermostats will create false readings. So will doors or windows left open for too long. In winter, windows left open could cause radiators and pipes to freeze, burst and flood your apartment and others below. The resulting damages would result in a substantial expense to you.

Appliances

Before reporting an electrical appliance service problem, ensure that the cord is firmly plugged into the wall outlet, or that a circuit breaker in the electrical panel is not tripped.

If it is a **stove** problem ensure that the clock is set to the "manual" position. If it is a plug-in type of stove element, ensure that the element is firmly inserted.

If it is a **dishwasher** problem, make sure it is turned to the "ON" position, the washer door is firmly closed, and the water supply valve is turned on.

Enamel surfaces such as those found on appliances seem tough, but they should be cleaned with care. Smooth cloths and liquid detergents are best for appliance surfaces. Stove spills should be cleaned up quickly to avoid hardening. The best advice for ovens is to regularly use a good oven cleaner. Be careful of the temperature-sensing unit or you could make it give a false reading. Steel wool scouring pads are fine for stove elements, but they'll damage enamel surfaces, as will abrasive cleansers or sharp instruments.

The **refrigerator freezer** should be defrosted when frost is 5 mm (1/4") thick, or whenever it interferes with storage capacity or with the door closing.

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A pan of warm water in the freezer compartment will speed up the process. ***Using a boiling kettle or chipping the ice with a sharp instrument can easily result in a costly repair bill!***

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2. Do not use humidifiers or vaporizers continuously.
3. Keep the apartment at the proper temperature (19°C to 22°C).
4. Keep curtains and blinds open.
5. Do not keep bedroom and bathroom doors closed–allow air to circulate in your apartment.
6. Try to limit the production of water vapour by shortening showering and bathing times, reduce the amount of stovetop boiling, and keep pots covered when cooking.
7. Do not hang wet clothes in the apartment.
8. Do not install and use portable clothes dryers.

If windows are difficult to open, a silicone spray lubricant (not petroleum-based products) will fix sticking aluminum windows. For sticky wooden windows, rub a candle in the track. If your sliding patio doors will not slide, check the track for foreign objects. If this is not the problem, it could be that the wheels that ride on the track are broken—drop a Maintenance Request at the Management Office or give it to the Superintendent.

For the safety of small children, furniture and large objects that could facilitate climbing should be removed from beneath windows and on balconies. Windows are installed with a device that will not allow them to open more than 10 cm (4 inches).

If condensation is still a problem, or the windows are not operating as indicated above, fill out a Maintenance Request form and forward it to the Management Office or Superintendent.

Plumbing Information

If you notice a leaking pipe, dripping faucet or running toilet, notify the Management Office or Superintendent immediately.

Remember, your toilet fixtures were not designed to handle disposable diapers, sanitary napkins or other items that could cause a stoppage and backup.

6.0 Fire Safety Information

Fire safety is everyone's concern, as everyone is responsible for each others health and safety in this matter. For increased safety, it is necessary to look at the major causes of apartment (condominium) house fires. Studies have shown that smoking is the cause in approximately 25 per cent of all fires, while cooking equipment and appliance wiring are responsible for about 10 per cent each. Therefore, approximately 50 per cent of all apartment fires can be avoided with proper care.

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The Superintendent must be informed of any handicapped persons that would require assistance in the event of a fire.

Procedures to Follow in Case of Fire:

If You Discover a Fire:

- Leave the area of the fire, closing all doors behind you.
- Activate the alarm at the nearest pull station.
- Telephone the fire department. Never assume that this has already been done.
- Use stairwells to exit the apartment building.
- If the corridor is filled with smoke it may be advisable to stay in your apartment. Put wet towels along the base of the entry door to prevent smoke from getting in. Call the fire department to let them know where you are.
- If you see smoke in the stairwell, try another exit way. Do not risk trying to get through smoke filled corridors and stairwells if you are not immediately threatened by fire.
- Do not use the elevators until the alarm has been turned off and the fire officials have deemed it safe to do so.

If You Hear the Fire Alarm:

- Feel for heat around the door of the suite. If the door is hot, remain in the suite.
- If there is no smoke or fire in the corridor, exit by the nearest stairwell. Stay calm, and do not run down the stairwell.
- If there is smoke or fire in the stairwell, try another stairwell, or return to your suite.
- If you encounter smoke, stay low, and breath from as close to the floor as possible.
- Close all windows and doors behind you.

If You Must Stay in Your Suite:

- Close the door, but keep it unlocked.
- Phone the fire department and tell them where you are located in the building.
- Seal cracks with damp towels where smoke may enter your suite, (such as under the door).
- If room is smoky, remain low.
- Move to the balcony or any room with a window if smoke or fire gets into your suite.
  If you are on the balcony, close the balcony doors. If you are in a room, seal off the room using wet towels and open the window slightly for air. If smoke is coming in the window, close it.
- Stay calm and wait for instructions or rescue.

7.0 Building Security

The following guidelines should be followed to maintain building security:

1. Never let people follow you into the building if they did not use a key to enter. This includes delivery people. All visitors should be "buzzed" in by the person they are visiting.
2. Never "buzz" in anyone you are not sure of.
3. Immediately report anything suspicious to a security guard or to the Superintendent (or other on-site staff).
4. Pick up your mail from your mailbox on a regular basis.
5. Notify the Superintendent and cancel all newspaper subscriptions whenever you are planning to be away for an extended period of time.
6. Immediately report doors that are left open or not working properly to a security guard or to the Superintendent (or other on-site staff).
7. Do not allow people to slip into the building as you enter. This applies to the parking garage as well. Do not be afraid to ask people their business in the building. Report any suspicious persons who do not have a good reason for being in the buildings.

APPENDIX F

master operational checklist

This generic list is provided for reference purposes. Most buildings will have fewer items than are listed here. Delete the ones that do not apply. Some of the items under "Work to be Completed" are self explanatory, while others require more detail. See the appropriate section in this Manual as indicated in the first column of the checklist.

Master Operational Checklist

Building: ________________________

Building Operator: ________________________

Property Manager: ________________________

Legend
PM = Property Manager
S = Site Staff
C = Contractor
X = Suggested Month

Operations Manual for Maintenance & Custodial Staff	***Work to be Completed***	***By***	***J***	***F***	***M***	***A***	***M***	***J***	***J***	***A***	***S***	***O***	***N***	***D***
	Daily													
1.6	Daily Look / Listen / Touch Inspection (DLLT)	S												
2.5.2	Clean Garbage Compactor Room	S/C												
2.5.4	Clean Interior Glass	S/C												
2.5.5	Clean Common Area Washrooms/Showers	S/C												
2.5.6	Clean Sauna Room	S/C												
2.5.8	Spot Cleaning in Common Areas and Hallways	S/C												
n/a	Pick up Litter on Site	S/C												
8.10	Check the Elevator Systems (DLLT)	S												
8.11	Check the Overhead Garage Doors (DLLT)	S												
5.7	Check all Electrical Motors (DLLT)	S												
6.9	Check Fire Alarm Control Panel (DLLT)	S												
6.9; 6.10	Perform Checks on Fire Safety Systems (DLLT)	S												
8.2.1	Monitor Heating Water Temperature (DLLT)	S												
8.2.5	Check level of Cushion Tank (DLLT)	S												
8.5.5	Clean Lint Screen from Laundry Exhaust	S												
	Multiple Times per Week													
n/a	Empty Trash Cans and Ash Trays (4X)	S/C												
2.2	Sweep Floors of Lobby & Entrances (4 times)	S/C												
2.2	Sweep Stairs and Landings (2X)	S/C												
2.2.2	Mop Pool Deck (2X)	S/C												
2.3	Vacuum & Spot Clean Elevator Carpets (4X)	S/C												
2.3	Vacuum & Spot Clean Lounge Carpet (4X)	S/C												
2.3	Vacuum Common Room Carpets (4X)	S/C												
2.3	Spot Clean Common Room Carpets (4X)	S/C												
2.3	Vacuum & Spot Clean Carpets in Corridors (4X)	S/C												
2.3.2	Vacuum Walk-Off Mats (4X)	S/C												
2.5	Wash Entrance Doors (4X)	S/C												
2.5	Clean and Disinfect Intercom Panel (4X)	S/C												
2.5.5	Dust Chrome Fixtures (4X)	S/C												
2.5	Dust Lighting Lenses or Sconces (outside) (4X)	S/C												
2.5	Wash Elevator Doors (outside) (2X)	S/C												
2.5	Wash Elevator Doors (inside) (4X)	S/C												
2.5	Clean and Disinfect Elevator Controls (4X)	S/C												
2.5	Clean and Polish Elevator Mirrors (4X)	S/C												
2.5	Clean Fitness Centre Equipment (2X)	S/C												
2.5.4	Clean Lobby Glass (4X)	S/C												
n/a	Perform Routine Maintenance on Pool (3X)	C												

	Work to be Completed	**By**	**J**	**F**	**M**	**A**	**M**	**J**	**J**	**A**	**S**	**O**	**N**	**D**
	Weekly													
2.2	Sweep Floors in Mechanical / Electrical Rooms	S/C												
n/a	Buff Floors	S/C												
2.5	Polish Chrome Fixtures	S/C												
2.5	Wash Elevator Walls	S/C												
2.5	Dust all Common Room Ledges	S/C												
2.5.3	Clean Garbage Chute	S/C												
3.2.1	Mow Lawn	S/C												
3.2.2	Water Lawn	S/C												
6.8.3	Drain Drip Drums on Sprinkler System	S												
6.0	Perform Weekly Check on Fire Safety System	S												
	Twice a Month													
2.2.1;2.2.2	Mop Stairs and Landings													
2.5	Wet Wash Handrails in Stairwells													
	Monthly													
1	Review Daily Log Books	PM												
2	Spot Sweep Underground Parking	S/C												
2	Shampoo Walk-Off Mats and Hang to Dry	S/C												
2.2	Mop Floors in Mechanical / Electrical Rooms	S/C												
2.4	Pest Control Service	C												
3	Inspect Property	PM												
n/a	Lubricate Weed Trimmer	S/C												
n/a	Inspect Lawn Mower	C												
4	Check Underground Parking	S												
4.4	Inspect Built Up Roof	S			X	X	X	X	X	X	X	X	X	
8.10	Elevator Log Sheet Checked	PM												
8.10	Elevator Maintenance	C												
5.2	Check all Lights and Ballasts	S												
5.6	Test Ground Fault Interruptors	S												
6.6	Check all Fire Extinguishers	S												
6.8.2:8.8.6	Perform Maintenance on Air Compressors	S												
6.7	Inspect Fire Hose Stations	S												
6.10	Perform Monthly Check on Fire Safety System	S/C												
n/a	Inspect Water Treatment System	C												
8	Inspect Boilers for Leaks	C												
8.3.1	Chiller Maintenance	C					X	X	X	X	X	X		
8.4.1	Lubricate and Clean D/X Systems	S/C												
8.5.4	Replace F/A Filters	S												
	Six Times per Year													
1	Stock Order	PM/S	X		X		X		X		X		X	
5.7; 8.5.3 8.7.4	Lubricate Motors, Pumps and Fans	C		X		X		X		X		X		X
6.1	Perform Checks on Fire Safety Systems	C	X		X		X		X		X		X	
	Four Times per Year													
2.3	Shampoo Carpets	C	X		X				X		X			
8.11	Overhead Door Service	C		X			X			X			X	
6	Fire Drills	PM/S	X			X			X			X		
	Three Times per Year													
2	Power Sweep/Wash U/G	C		X			X				X			
n/a	Clean Catch Basins of Debris and Ice	C/S		X			X					X		

	Work to be Completed	By	J	F	M	A	M	J	J	A	S	O	N	D
	Semi-Annually													
n/a	Staff Appraisals	PM		X										X
2	Major Carpet Cleaning	C					X							X
n/a	Int. Catch Basin Cleaning	C			X						X			
3	Powersweep Outside	C			X						X			
3.2.3	Fertilize Lawn	C					X				X			
3.4	Weed Spray (as required)	C												
3.3.4	Prune Landscaping (Spring & Fall)	C				X					X			
n/a	Inspect Doors and Windows	S/C			X								X	
8.9	Compactor Maintenance	C			X						X			
5.5	Emergency Generator Service/Report	C				X						X		
6.0	Perform Checks on Fire Safety Systems	C												
8.4	Inspect Coils, Ducts and Dampers	C												
8.5.5	Service and Clean Clothes Driers	S												
8.4	Fan Coil Maintenance	C				X						X		
	Annually													
n/a	Budget Preparation	PM								X				
n/a	Revise Annual Operational Check List	PM	X											
n/a	Revise Items on Monthly Planner	PM	X											
n/a	Revise Daily Look / Listen / Touch Form	PM	X											
n/a	Staff Holiday Schedule	PM		X										
n/a	Update Building Inventory	PM	X											
n/a	Order Salt/Calcium	PM										X		
n/a	Install Christmas Decorations	S											X	
n/a	Remove Christmas Decorations	S	X											
n/a	Insurance Renewal	C												
n/a	Insurance Approval	C												
n/a	Inspect Benches, Planters & Tree Guards	C												
n/a	Perform Maintenance on Snow Blower	CO										X		
n/a	Inspect Exterior Painting	PM					X	X						
n/a	Inspect Signs/Fences	PM					X							
n/a	Clean Entrance Canopy	S					X							
n/a	Install Nets, Insp. Tennis Courts/Playgrounds	S					X							
n/a	Clean Garage Exhaust Pits	C							X					
n/a	Exterior Window Cleaning	C							X					
n/a	Inspect All Water Hoses	C		X										
n/a	Parking Lot Line Painting	C						X						
n/a	Add Topsoil	C										X		
n/a	Turn Lawn Sprinkler System On	C					X							
n/a	Turn Lawn Sprinkler System Off	C										X		
n/a	Replace Winter Kill	C					X							
n/a	Spring Cleanup	C				X								
n/a	Fall Cleanup	C										X		
n/a	Plant Flowers	C					X							
n/a	Inspect Paving/Concrete	PM					X							
3.2.3	Spring Fertilization	C				X	X							
3.2.3	Fall Fertilization	C									X	X		
3.3	Prune Trees and Shrubs	C				X	X	X						
2.5.1,2.5.3	Garbage Bin/Chute Cleaning	C						X						
n/a	Ramp Inspection	C								X				

	Work to be Completed	By	J	F	M	A	M	J	J	A	S	O	N	D
	Annually													
n/a	Ext. Catch Basin Cleaning	C						X						
n/a	Inspect Roof Anchors	C				X								
n/a	Inspect All Sidewalks	C												
n/a	Inspect Retaining Walls	C												
n/a	Inspect Stairs and Rails	S				X								
4.2	Check Structural Integrity of Foundation	S												
4.4	Have Roof Inspected	C												
8.12	Turn On Ramp Heating System	C											X	
8.12	Turn Off Ramp Heating System	C				X								
n/a	Turn On Pipe Tracing Systems	S										X	X	
n/a	Turn Off Pipe Tracing Systems	S		X	X									
5	Tighten Over 200 Amp Connections	C		X							X			
5	Service Video Equipment	C	X											
5	Wash Light Fixtures													
n/a	Turn On Power to Car Block Heaters	S											X	
n/a	Turn Off Power to Car Block Heaters	S			X									
n/a	Inspect Aluminum Electrical Distribution	C												
5.4.3	Check In-Suite Aluminum Wiring	C												
6	Vacuum Smoke Detectors	S												
6	Fire Safety Equipment Inspection/Certificates	C												
6.6	Have Fire Extinguishers Inspected	C												
6	Perform Checks on Fire Safety Systems	C												
n/a	Connect Pool Phone	PM						X						
n/a	Disconnect Pool Phone	PM									X			
7.4	Flush Horizontal/Vertical Drains	C						X						
n/a	Sump Pits/Catch Basin Cleaning	C						X						
n/a	Open Pool	C						X						
n/a	Winterize Pool	C										X		
n/a	Inspect Grout/Caulking-Showers/Hot Tubs	PM											X	
n/a	Drain All Exterior Hose Bibs	S										X		
7.4.3	Power Wash Horizontal Drains	C												
n/a	Service Backflow Preventors	C										X		
8	Clean Hot Water Tanks	C							X					
8	Clean Heat Exchangers	C							X					
8	Clean Pump Strainers on all Pumps	C							X					
8	Heating Changeover	C									X	X		
8	Cooling Changeover	C				X	X							
8	Have Laundry Venting Thoroughly Cleaned	C				X					X			
8	Check Boiler Controls and Sensors	C												
8.2.3	Clean All Boilers	C						X	X					
8.2.3	Have Boilers Tested for Efficiency	C	X											
8.3.1	Winterize Chiller	C										X		
8.3.1	Perform Maintenance on Chiller	C	X	X										
8.3.3	Perform Cooling Tower Maintenance	C				X	X							
n/a	Inspect Fire Doors and Fire Dampers	C										X		

	Work to be Completed	By	J	F	M	A	M	J	J	A	S	O	N	D
	Misc. (Frequency)													
2	Clean Suite (Tenant Change)	S/C												
4.4	Perform Thermal Scan of Roof (3 to 4 yrs)	C												
5.4.1	Check Suite Electrical Outlets (Tenant Change)	S												
6.6	Hydrostatically Test Extinguishers (5 yrs)	C												
6.6	Empty & Test all Fire Ext. (6 yrs)	C												
6.6	Hydrostatically Test Dry Chem. Ext. (12 yrs)	C												
6.8	Test Dry Pipe System for Obstructions (15 yrs)	C												
6.8	Hydrostatically Test Dry Pipe Standpipe (5 yrs)	C												
6.0	Perform Checks on Fire Safety Systems (2 yrs)	C												
7.2.	Replace Faucet Washers (2 yrs)	S												
7.4.	Power Wash Vert. Kitchen Stacks (5 to 7 yrs)	C												

APPENDIX G

schedule of budget times required for various cleaning tasks

This table provides an estimate of the time required to perform various cleaning and maintenance tasks. Use this guide to estimate workloads for on-site staff.

Housekeeping Maintenance Hours Guide

Operations Manual for Maintenance & Custodial Staff	*Task*	*By*	*Time Requirement*
Daily			
2.5.2	Clean Garbage Compactor Room	S/C	
2.5.4	Clean Interior Glass	S/C	300 sq. ft. per hour
2.5.5	Clean Common Area Washrooms/Showers	S/C	
	- per toilet		4 min
	- per door, spot wash both sides		1 min
	- mirrors		1 min
	- sanitary napkin dispenser		1/2 min
	- urinal		3 min
	- wash basin and soap dispenser		3 min
	- general cleaning		120 min per 1000 sq.ft.
2.5.6	Clean Sauna Room	S/C	
2.5.8	Spot Cleaning	S/C	
Multiple Times per Week			
2.2	Sweep Floors of Lobby & Entrances (4 times)	S/C	30 min per 1000 sq.ft.
2.5	Wash Entrance Doors (4X)	S/C	125 min per 1000 sq.ft.
2.5.4	Clean Lobby Glass (4X)	S/C	125 min per 1000 sq.ft.
2.5	Clean and Disinfect Intercom System (4X)	S/C	2 min
2.3.2	Vacuum Walk-Off Mats (4X)	S/C	30 min per 1000 sq.ft.
2.3	Vacuum & Spot Clean Carpets in Corridors (4X)	S/C	30 min per 1000 sq.ft.
	Empty Trash Cans and Ash Trays (4X)	S/C	0.5 min per can or ashtray
2.5	Dust Chrome Fixtures (4X)	S/C	0.4 min per fixture
2.5	Dust Lighting Lenses or Sconces (outside) (4X)	S/C	0.4 min per fixture
2.5	Wash Elevator Doors (outside) (2X)	S/C	5 min per door pair
2.5	Wash Elevator Doors (inside) (4X)	S/C	5 min per door pair
2.3	Vacuum & Spot Clean Elevator Carpets (4X)	S/C	5 min per elevator
2.5	Clean and Disinfect Elevator Controls (4X)	S/C	2 min
2.5	Clean and Polish Elevator Mirrors (4X)	S/C	300 sq.ft. per hour
2.2.2	Mop Pool Deck (2X)	S/C	100 min per 1000 sq.ft. (includes rinse)
2.3	Vacuum & Spot Clean Lounge Carpet (4X)	S/C	30 min per 1000 sq.ft.
2.3	Vacuum Common Room Carpets (4X)	S/C	25 min per 1000 sq.ft.
2.3	Spot Clean Common Room Carpets (4X)	S/C	5 min per 1000 sq.ft.
2.5	Clean Fitness Centre Equipment (2X)	S/C	
2.2	Sweep Stairs and Landings (2X)	S/C	60 min per 1000 sq.ft.
Weekly			
n/a	Buff Floors	S/C	45 min per 1000 sq.ft.
2.5	Polish Chrome Fixtures	S/C	2 min per fixture
2.5	Wash Elevator Walls	S/C	30 min per elevator
2.5	Dust all Common Room Ledges	S/C	
2.2	Sweep Floors in Mechanical / Electrical Rooms	S/C	30 min per 1000 sq.ft.
2.5.3	Clean Garbage Chute	S/C	10 min per floor
Twice a Month			
2.2.1;2.2.2	Mop Stairs and Landings		100 min per 1000 sq.ft. (includes rinse)
2.5	Wet Wash Handrails in Stairwells		5 min per stairwell per floor
Monthly			
2	Shampoo Walk-Off Mats and Hang to Dry	S/C	15 minutes per mat
2.2	Mop Floors in Mechanical / Electrical Rooms	S/C	100 min per 1000 sq.ft. (includes rinse)
2	Spot Sweep Underground Parking	S/C	30 min per 1000 sq.ft.
Four Times per Year			
2	Shampoo Carpets	C	60 min per 1000 sq.ft.
Three Times per Year			
2	Power Sweep/Wash U/G	C	15 to 50 min per 1000 sq.ft., depends on machine used
Semi-Annually			
2	Major Carpet Cleaning	C	60 min per 1000 sq.ft.
2.5.1	Int. Catch Basin Cleaning	C	
Annually			
2	Inspect Benches, Planters & Tree Guards	C	
2	Perform Maintenance on Snow Blower	C	
Misc. (Frequency)			
2	Clean Suite (Tenant Change)	S/C	

APPENDIX H

supplementary publications and information resources

The Institute of Real Estate Management, **The Resident Manager: On-Site Management Handbook for Apartments and Condominiums,** *The Institute of Real Estate Management*

Although somewhat dated, this book gives excellent background as to the role of the on-site Superintendent. It also provides an extensive List of Forms that can be used in the day-to-day operation of the building.

The Urban Land Institute and the Community Associations Institute, **Financial Management of Condominium and Homeowners' Associations,** *The Urban Land Institute*

An in-depth look at the budget process, different accounting methods, different financial procedures, and the preparation of budgets and financial statements. Note that much of what is recommended is based on the US tax system.

Shear, Mel A., **Property Management Reinvented; How to Convert Maintenance and Energy Expenses to Profits,** *Prentice-Hall Inc.*

An excellent book, outlining the most cost effective methods of operating a multi-residential apartment building or condominium. It goes into great detail about budgeting, human resource management, contracting, energy management, etc.

Shear, Mel A., **Handbook of Building Maintenance Management,** *Prentice-Hall Inc.*

This book breaks out all of the building components and systems into appropriate services (housekeeping, groundskeeping, electrical services, etc.), then goes into great detail explaining each service. The book is excellent at explaining the fundamentals behind each service, and how different components of the service should be repaired or maintained.

Resident Managers' Training Institute, **Apartment & Condominium Operators' Manual,** *Resident Managers' Training Institute.*

This manual is available only by taking the RMTI Certified Resident Manager Course. The manual takes a view of the entire operation of an apartment building, from leasing and tenant relations, to step-by-step instructions for routine maintenance and repairs.

Kaiser, Harvey H., **The Facility Manager's Reference - Management; Planning; Building Audits; Estimating,** *R.S.Means Company Inc.*

This book is geared for Facility (Property) Managers of large facilities (hospitals, large office buildings, factories, etc.). It goes into more detail than is generally required in a multi-residential building. It does have a section on estimating the cost of projects that may be very beneficial.

The following Canada Mortgage and Housing Corporation publications may also be beneficial in the operation of your building:

Canada Mortgage and Housing Corporation, **Cost-Effective Concrete Repair: Research, Investigation, Analysis, and Implementation,** *Canada Mortgage and Housing Corporation*

Canada Mortgage and Housing Corporation, **Energy Efficiency in Multi-Unit Residential Buildings: A Handbook for Owners and Operators,** *Canada Mortgage and Housing Corporation*

The following codes, legislated standards and industry standards may also be beneficial documents to obtain for the operation of your building:

Industrial Accident Prevention Association, **Shredder-Compactor Safety,** *Industrial Accident Prevention Association*

National Standards of Canada, **Boiler, Pressure Vessel, and Pressure Piping Code,** *Canadian Standards Association*

National Standards of Canada, **Emergency Electrical Power Supply for Buildings,** *Canadian Standards Association*

National Standards of Canada, **Manual for the Selection, Installation, Maintenance, and Field Testing of Backflow Prevention Devices,** *Canadian Standards Association*

National Standards of Canada, **Mechanical Refrigeration Code,** *Canadian Standards Association*

Ontario Government - Ministry of the Solicitor General - Office of the Fire Marshal, **The Fire Code,** *Queen's Printer for Ontario*

Ontario Government - Ministry of the Solicitor General - Office of the Fire Marshal, **Ontario Regulation 627/92,** *Queen's Printer for Ontario*

Ontario Government, **A Guide to the Occupational Health and Safety Act,** *Queen's Printer for Ontario*

Ontario Government, **A Guide to the Window Cleaning Regulation,** *Queen's Printer for Ontario*

Ontario Government, **Operating Engineers Act,** *Queen's Printer for Ontario*

The Employer and the Workplace **Hazardous Materials Information System (WHMIS)** *Human Resources Development Canada*

Ontario Hydro Commercial Marketing Department, **Ontario Hydro Commercial Electric Energy Manual Fundamentals and Applications,** *Ontario Hydro.*

This manual is actually two separate manuals. The *Fundamentals* manual talks about the different end of electricity (such as heat pumps, motors, lighting, cooking, refrigeration, etc.) It also describes different electrical rate structures, building controls systems and electrical equipment (transformers, electrical meters, etc.).

The *Applications* manual characterizes of different types of buildings. Section 2 of the manual focuses on multi-residential buildings, and shows typical consumptions and loads for equipment that would typically be found in one of these buildings.

The following ***Ontario Hydro*** booklets are an excellent source of information. They are generally well written, and easy to understand.

Energy Management Control Systems: Reference Guide
Energy-Efficient Housing: Reference Guide
Heat Pump: Reference Guide
Lighting: Reference Guide
Motors: Reference Guide

Government Agencies:

CMHC - Canada Mortgage and Housing Corporation (613) 748-2000 (Ottawa area or outside Canada) or 1 800 668-2642 (elsewhere in Canada) www.cmhc.ca

Associations:

IREM - Institute of Real Estate Management (312) 329-6092. Have a comprehensive catalogue of publications.

REIC - Real Estate Institute of Canada (Associated with IREM) - (416) 253-0803.

BOMA - Building Owners and Managers Association - (416) 596-8065.

ACMO - Association of Condominium Managers of Ontario - (416) 626-7895. Have an excellent ***Professional Services and Trades Directory.***

Ontario Non-profit Housing Association (416) 927-9144

Fair Rental Policy Organisation of Ontario (416) 961-3698 - Lobby group for Building Rental Properties.

Journals and Periodicals:

J.P.M. - Journal of Property Management - Published by IREM.

Property Management Magazine

Condominium Magazine

Real Estate Forum

Real Estate Property Management Journal

Cleaning and Maintenance - National Trade Publications - (518) 783-1281

Canadian Housing - Published by Canadian Housing and Renewal Association.

APPENDIX I

material safety data sheet – supplemental information

Material Safety Data Sheet (MSDS)

The following additional information comes from the CMHC Publication **"About Your House: How To Read a Material Safety Data Sheet"**.

A Canadian MSDS would have the following nine sections:

Section 1: Product Information

This section includes:

- product and/or trade name
- Product Identification Number (PIN)
- chemical formula for required chemicals
- manufacturer or supplier
- addresses and phone numbers, including emergency phone numbers
- descriptions of common or intended uses

Section 2: Hazardous Ingredients

This section typically includes:

- the names of the required hazardous ingredients
- their percentages by weight or volume
- the Chemical Abstract System (CAS) numbers
- LD50 (Lethal Dose) / LC50 (Lethal Concentration) test results
- occupational exposure limits

There may be several names or variations for the same ingredient or chemical. Each chemical is assigned a CAS number by the American Chemical Society. CAS numbers can help you focus on the right chemical and not on any with a similar sounding name. Many chemical names include numbers that must also be the same. LD50 or LC50 tests indicate how much of the chemical is required to kill half of an animal test population. Each LD50 or LC50 result relates to a specific animal type and exposure route. It cannot be compared to another LD50 or LC50 unless it also refers to the same animal type and exposure route. Whenever you try to compare information on two products, it is important that you use equivalent information.

Section 3: Chemical and Physical Properties

This section includes information on the chemical and physical properties of the product.

- if it is a liquid, solid or vapour under stated conditions
- if it has a distinctive appearance or odour
- freezing and boiling points
- if and how fast it will evaporate
- what it looks and smells like
- if it is an acid or base

Section 4: Fire and Explosion

This section describes how to prevent a fire or explosion while storing and using the product. It also recommends how to put out a fire.

Section 5: Reactivity

This section tells you under which conditions dangerous chemical reactions can occur. This information explains how you can avoid dangerous mixtures and how to use appropriate storage methods.

Section 6:Toxicity

This section includes information on acute (short-term) and chronic (long-term) health effects, signs and symptoms. It tells you if the product is irritating, or can cause sensitization, allergies, asthma or cancer. It also tells you if the product can interfere with normal cell and organ development (developmental and reproductive effects), and if there are any effects that occur when this chemical is combined with others (additive and synergistic effects).

The information in this section is based on how the product would be used in a workplace setting. It also includes information on workplace exposure limits set by various regulatory agencies. Each exposure is related to the route of entry, which refers to how the chemical can enter your body. For instance, it may enter by skin or eye contact, through lungs (inhalation) or stomach (by swallowing).

MSDS's usually do not include much information on some elements consumers may be interested in, such as neurological (nerves and the brain), hormonal, and cognitive (learning) effects.

This section may be less relevant for residential settings where long-term exposures to low doses and complex chemical mixes are more common. Also, since most of the information was developed in relation to adult male exposures, it may be less relevant in residential settings where at-risk populations such as children, the handicapped persons and older people live.

Section 7: Prevention

This section tells you if you need to wear special clothing, or use ventilation and filter masks to protect yourself when using the product.

Section 8: First Aid

This section tells you what to do in an accident or emergency situation.

Section 9: Preparation

This section tells you who wrote the MSDS, their address and telephone number, and the date when it was written or last revised. An MSDS is valid for three years after it is produced or last revised.

Additional MSDS Information

There may be additional sections in an MSDS with more information on environmental effects. For example, information may include effects on birds, plants, animals and microorganisms; recommended disposal and transportation methods; regulatory issues and miscellaneous data.

Other Information: Sources for Chemical Ingredients

There are many sources of additional information, including The Canadian Chemical Producers Association, The Canadian Centre for Occupational Health and Safety, industry associations, universities, environmental organizations, federal and provincial ministries, librairies and the Internet. As well, there are chemical, health and environmental indexes in the library, on disc or on the Internet.

Many databases are now on the Internet. If you do not have home or office access, your local library or educational institution can probably provide access to the Internet for you, even if you do not know how to operate a computer. Some Internet sites may charge a fee for services provided.

To perform a general search on the Internet, type in "chemical abstracts" or "environmental abstracts." These searches will provide a list of appropriate information sources. Both libraries and the Internet have chemical and environmental abstracts that list most of the available information sources under appropriate categories.

If you cannot get information on regulated or unregulated ingredients in a product, you can look in a chemical formula textbook that lists typical formulas for many products. You can also read consumer versions that highlight both the typical ingredients in consumer products and their health effects. These sources may be helpful but should not be relied upon since there are many ways to make the same product. Once you know the chemical name and/or CAS number, you can search a chemical index. You can call The Canadian Chemical Producers hotline for the names of chemical suppliers if you cannot find information online, or in a library. Keep in mind that some of these agencies are not set up to serve the public and may not be able or willing to provide full service responses.

Resources

The following are typical examples of chemical and chemical effects resources. Some only list Web sites since information from these resources is primarily available through the Internet.

Art and Craft Material Institute
1280 Main St.
P.O. Box 479
Hanson, MA 02341
Phone: (781) 293-4100
Fax: (781) 294-0808

Canadian Centre for Occupational Health and Safety
Phone: 1 800 263-8466, or (905) 570-8094
Fax: (905) 572-2206
E-mail: custserv@ccohs.ca
Web site: http://www.ccohs.ca/

Canadian Chemical Producers Hotline
Phone: 1 800 267-6666
Chemical Abstracts Service (CAS)
Web site: http://info.cas.org/

Chemport
Web site: http://www.chemport.org
EPA, Indoor Air Quality Information Clearinghouse
Washington, D.C.
Phone: (703) 356-4020
Fax: (703) 356-5386
E-mail: iaqinfo@aol.com

European Centre For MSDS Services
Web site: http://www.cheminform.de
Health Canada, Ottawa, Ontario
Phone: (613) 954-5995
Fax: (613) 952-7266
Web site: http://www.hc-sc.gc.ca

The Industrial Accident Prevention Association
Toronto, Ontario
Phone: (416) 506-8888
Web site: http://www.iapa.on.ca

Occupational Safety and Health
Administration (OSHA)
Washington, D.C.
Phone: (202) 523-5181

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